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ABSTRACT

This report evaluates Chapter 636 programs in the Springfield (Massachusetts) Public Schools in 1984-85. The overall goal of these programs is to improve the quality of education in a desegregated setting. The report is divided into twelve sections. The first presents a general overview of all the programs' effectiveness in meeting five general goals: (1) to improve basic skills achievement with emphasis on narrowing the gap between majority and minority students; (2) to increase the number of non-Hispanic students enrolled in District VI schools; (3) to improve gender and racial balance in the high schools; (4) to increase the participation of parents and teachers in the Chapter 636 process; and (5) to increase student integration. The next eight sections are devoted to evaluating different types of programs: academic (reading/language arts and mathematics); cultural awareness; foreign language; in-house suspension; magnet schools; science; and staff/curriculum development. The tenth section presents a special study of how Chapter 636 programs promote integration, reports that these efforts are quite successful, and makes recommendations for further improvement. The eleventh section provides results of the perceptions of principals, teachers, and parents. The final section summarizes the report. Numerous graphs and data tables to support conclusions are included. (KH)

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Springfield Public Schools

Chapter 636 Programs

1984-1985

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Evaluation Report

SPRINGFIELD PUBLIC SCHOOLS
Springfield, Massachusetts

EVALUATION REPORT

CHAPTER 636 - YEAR XI

1984-85

Prepared by Gary J. Roberts
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August, 1985

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Special thanks to Dr. Philip P. Halloran, Supervisor of Mathematics, and to Mr. Edward Finneran, System Manager, for their continued assistance and support in the computer processing of the data for this report. Without their assistance, the scope of this evaluation would have been considerably lessened.

TABLE OF CONTENTS

A. OVERVIEW 1

PROGRAM EVALUATIONS:

B. Academic Programs: Reading/Language Arts, Math 42

C. Career Awareness Programs 101

D. Cultural Enrichment Programs: Art, Music, Theatre Arts . . . 113

E. Foreign Language Programs 138

F. In-House Suspension Programs 155

G. Magnet School Programs 167

H. Science Programs 221

I. Staff/Curriculum Development Programs 232

J. SPECIAL REPORT: Integration 250

K. PERCEPTIONS: Principals, Teachers, Parents 301

L. SUMMARY REPORT: 317

A. OVERVIEW

A. Overview

The overall goal of the Chapter 636 programs in the Springfield Public Schools is to improve the quality of education in a desegregated setting. There were also five system-wide objectives as part of a three year plan beginning in 1982-83, as well as more specific objectives for each of the program component areas. The five system wide objectives were to improve achievement with emphasis on narrowing the gap between majority and minority students, to increase the number of non-Hispanic students enrolled in District VI schools, to achieve an improved gender and racial balance in the high schools, to increase the participation of parents and teachers in the Chapter 636 process, and to continue to increase the integration of students as demonstrated by increases in cross-racial selections.

Considerable flexibility has been given to local school administrators for determining how best to improve the quality of education in their individual schools and for setting up their Chapter 636 programs in order to attain the system-wide and program objectives. This flexibility is believed by many to be the greatest asset of Chapter 636.

In Springfield, the total amount of Chapter 636 funding is based upon the number of students being transported for racial balance which then is divided into separate elementary and secondary funds. Total funding this year was over $1.8 million (Section I and Section VIII monies combined). Aprroximately $113,000 (about 6 percent of the total Chapter 636 budget) was allocated for the administrative and evaluative component which included a Supervisor, an Evaluator, and accounting and clerical staff. Some funding was also targeted for magnet planning and new desegregation efforts while an additional allocation of over $121,000 was set aside as a supplement to programs at all schools. The remaining funds were distributed between elementary and secondary level schools and magnet programs. Approximately 75 percent of the funding, as in previous years, went to elementary schools while 25 percent went to secondary schools. A summary of allocations by school for the past nine years is given in Table A1.

Once allocations for each school were determined a period of time was set aside in the spring for schools to develop proposals based upon individual needs. All schools were encouraged to utilize needs assessments in the proposal development process and to involve teachers and parents in the decision-making process.

A concerted effort was made in the previous year to encourage greater parental involvement in the needs assessment process. The Supervisor or the Evaluator attended scheduled parent meetings at most elementary and secondary schools to present an overall perspective in assessing the need for new or existing programs. Unfortunately, the high level of parent participation in the development of Chapter 636 programs was not sustained this year as only 277 parents participated compared to 435 during the previous year (see Table A2). Indeed, 31 schools had fewer than ten parent participants (20 with fewer than five participants). The average number of parents participating per elementary school was only 8.3, the lowest figure ever. These figures were disconcerting, especially considering the fact that the largest number of parents ever, over 900, participated in the evaluation of Chapter 636 programs this year. Clearly, much still remains to be accomplished in encouraging parental involvement. In the opinion of this evaluator, this should be one of the top priorities of Chapter 636 in the coming school year.

At the conclusion of the needs assessment/proposal development process, all proposals were submitted to the Supervisor to be compiled. The Superintendent, along with his assistants, recommended a total Chapter 636 project to the School Committee and to the State Department of Education for approval. This report is an evaluation of those programs which were approved in the

Springfield Desegregation Project.

Data compiled for this report includes the following:

- over 100 on-site visitations;
- Fall-Spring census sheets of over 2600 students directly served by Chapter 636 staff;
- pre-post achievement tests of over 3000 students
- mid-year music achievement tests of over 700 students;
- pre-post writing samples of 26 students;
- pre-post behavior rating forms of over 250 students;
- pre-post occupational questionnaires of almost 300 students;
- pre-post attitude scales in reading or math of almost 300 students;
- progress reports of over 100 students receiving tutoring in Chapter 636 needs-based programs;
- post field trip surveys of over 100 teachers;
- Fall-Spring sociograms of over 300 students;
- weekly surveys of home-school liaisons;
- end-of-year surveys of:
  - 33 principals
  - 540 classroom teachers
  - 60 Chapter 636 teachers
  - 30 Chapter 636 aides
  - 910 parents
  - 2700 students;
- interviews with principals, Chapter 636 teachers and aides, regular classroom teachers and students.

Most of the $1.8 million Chapter 636 budget went into staff salaries. Some 67 full and part-time professionals and 34 full and part-time paraprofessionals were funded by Chapter 636, with the majority being female, white and continuing in positions held during the previous year (see Table A3). The total number of staff was about the same as last year, the result of slight increases in Chapter 636 which compensated for salary increases (see Table A4). Minority composition of professional staff was the lowest ever, only 7% (see Table A5). However, minority composition of paraprofessional staff, 32%, was the highest ever (see Table A6). Totally, racial distribution of Chapter 636 staff was 84% white, 10% black, 6% Hispanic (see Graph A1). Continuation of existing Chapter 636 programs, cutbacks in city-funded programs resulting from Proposition 2½, seniority provisions in staff contracts for existing staff and promotion of some minority Chapter 636 staff to the classroom together make the task of increasing representation of minorities in Chapter 636 staff a difficult one indeed. However, as new programs are developed and new staffing is required, priority must be given to seeking and hiring qualified minority staff.

Chapter 636 professional staff, as in previous years, were responsible for a variety of program areas including reading, language arts, math, science, social studies, music, art, career awareness, foreign language, theater arts, in-house suspension, and full-day kindergarten. In Table A7, the program area emphasis in full-time teacher equivalents is given for each school. The greatest number of schools targeted Chapter 636 funds for reading/language arts (31), followed by music (19), math (15), and science (9). Largest amount of teaching time, similarly, was allocated to reading/language arts (21.0) followed by music (8.8), math (8.7), and science (6.0).

As has been the case over the years, the area of greatest emphasis of Chapter 636 programs has been in reading/language arts (see Graph A2). However, amount of teaching time spent and percent of total emphasis in this area decreased this year to 37 percent of teacher instructional time, the lowest percentage in six years (see Table A8). Mathematics percent of total teaching time remained at 15 percent, the highest percent ever, perhaps a reflection of the increased usage of computers and computer-assisted mathematics instruction in the elementary schools, while music percent of total teaching time increased to 15 percent, the highest percent in four years.

The percent of program emphasis of Arts in Education types of programs (i.e. music, art, theater arts), programs that promote integration as well as cultural enrichment, increased this year to 23 percent of teacher instructional time (compared to only 19 percent last year), the highest percentage ever, perhaps an indication that schools are recognizing the importance of such programs at improving the quality of integrated education.

In Table A9 the number of schools over time with various teacher-centered Chapter 636 programs is presented. As can be seen there, reading programs have consistently been found in more schools than any other program, followed by math programs and music programs. The number of schools with Arts in Education programs increased this year from 24 to 27. As some schools had more than one of these programs, a total of 18 schools had one or more fine arts programs compared to 17 schools last year, although some 22 schools had no Chapter 636 Arts in Education program despite the demonstrated importance of such programs at improving the quality of integrated education.

The number of students served by each Chapter 636 teacher varied greatly as seen in Table A10. Some teachers worked with small groups of students while others provided services for all students within a school. In most cases, the number of students served by Chapter 636 teachers closely matched the racial distribution of the individual schools, though in 13 instances, this was not the case, and there was a significant discrepancy between racial distribution of the students served compared to the racial distribution of the school (according to x^2 analysis). In only four instances was this due to the design of the program (i.e., full-day kindergarten at Brightwood, and Spanish Maintenance at White and Van Sickle).

A closer analysis of racial distribution of students in Chapter 636 enrichment programs is provided in Tables A11, A12 and Graph A3. According to data in Table A11, there was a significantly disproportionate percentage of white students in Chapter 636 enrichment programs as was the case for the previous four years, though the disproportionality is decreasing over time. Overall, 50 percent of students in enrichment programs were white compared to only 43 percent of the population served, an improvement compared to a discrepancy of 9 percent last year and 14 percent in 1982-83, a direct result, perhaps, of following the recommendation made last year to increase minority composition of enrichment groups found initially to be disproportionately white. When initial racial census data of enrichment groups was submitted in October, computer analyses were made and, where significant discrepancies were found, principals were asked to reformulate the groups. Because of the cooperation of principals, the disproportion of white students in enrichment groups this year was at its lowest level ever, though this disproportion was still statistically significant, and racial composition of four enrichment groups remained disproportionately white.

In Table A13 and Graph A4, the racial distribution of students in Chapter 636 basic skills programs is summarized. Again, totally, this year as last year, there was a significant discrepancy between the racial distribution of students served compared to that of the school population, but in this case there was a disproportionate percentage of minority students served. However, the discrepancy this year was lower than that of any previous year. Totally, 56 percent of the students served in remedial programs were minority compared to 49 percent representation in the schools with these programs, a discrepancy of 7 percent compared to a discrepancy of 16 percent last year and 11 percent the previous year. Further, in only three schools were there significantly more minority students served than white students in basic skills programs. Clearly, schools have made considerable progress this year to ensure that white and minority students were not isolated from one another in Chapter 636 programs and that they were given increased opportunities to come together in racially mixed groupings for both enrichment and basic skills instruction.

Chapter 636 paraprofessional staff served either as full or part-time instructional teacher aides or as home-school liaisons or bilingual aides. Chapter 636 teacher aides served primarily in instructional tasks, as 75 percent of the daily work load was spent in working directly with students in an instructional capacity, a lower percentage than last year and slightly lower than the target of 80% (see Table A15). Most teacher aides, however, worked directly with students more than 80% of the time, with the overall percentage lowered by the few program teacher aides whose responsibilities were primarily of a clerical nature.

The majority of instructional aide services were directly involved with students. Services most frequently listed by aides were reinforcing skills in small groups, assisting students in classrooms, and tutoring individual students (see Table A16). Ranking of the services provided by teacher aides was similar to that of last year with only one minor change in the top eight most frequently listed services. Largest upward rank change was in helping to maintain records for school files while largest downward rank change was in helping to keep classrooms neat and orderly.

There was considerable variation in the number of students served by Chapter 636 paraprofessionals. Some aides provided services for a set number of students for an entire year on a regularly scheduled basis while others provided direct services for youngsters on an intermittent or "need" basis during the day and/or year. The average number of students directly served by Chapter 636 paraprofessionals is given in Table A17. According to the information there, Chapter 636 aides provided direct services to an average of 22 students on a regularly scheduled basis and 70 students on an intermittent or "need" basis during the year.

Chapter 636 instructional aides worked primarily with students in basic skills reinforcement. Some 21 instructional aides provided direct regular services to 865 students last year (see Table A18). Racial distribution of the students served by these aides was slightly higher in minority composition than the minority composition of the schools involved, but the discrepancy was not significant as was the case for the previous four years (see Table A19), once again a sign of progress toward more integrated groupings in Chapter 636 programs.

The succeeding chapter of this evaluation report concern the progress of the various Chapter 636 programs toward attaining pre-established objectives this year. Before reviewing these programs, however, we need to review the progress of Chapter 636 programs in general toward meeting the five previously stated system-wide objectives over a three year period beginning in 1982-83.

1. Improvement in basic skills achievement with emphasis on narrowing the gap between majority and minority students.

Comparison of city-wide test data over time is difficult considering that the CTBS was administered in all schools in 1982-83, that the MAT was administered in some schools in 1983-84 and the CTBS in others, and that the MAT was administered in all schools in 1984-85 with the new Metro 6 being piloted in grade 6. Only in grade 4 can any comparison be made over time, though even these comparisons reflect different testing times and instruments. In 1982-83, grade 4 students achieved a grade equivalent of 4.3 on the CTBS total battery, 2 months above grade level of testing (4.1). On the most recent testing in grade 4, students achieved a grade equivalent of 5.4 on the MAT given at the end of the year (4.8), six months above grade level, a noticeable improvement. Both white and non-white students scored above the norm on this most recent test (6.4 and 4.9 respectively) while only white students scored above the norm two years ago. Hispanic students still remain below grade level. While obtained achievement levels of white, non-white, and Hispanic students show a disparity on this testing as well as on previous testing, white, non-white, and Hispanic students all recorded higher obtained achievement than anticipated (as predicted by resultes of the OLSAT, an ability test). As seen in Graph A5, on the basic battery, obtained grade equivalence for white students was 6.4 (with 5.6 anticipated), for non-white students was 4.9 (with 4.6 anticipated), and for Hispanic students was 4.1 (with 3.9 anticipated). Though each group has achieved above expectations, efforts must continue to lessen the disparity in achievement levels.

2. Increasing the number of non-Hispanic students enrolled in District VI schools, especially at Brightwood, Lincoln, and Chestnut.

As seen in Graph A6 in school year 1982-83, the first year of the Chapter 636 three-year plan, only 77 non-Hispanic magnet students were enrolled at Lincoln, Brightwood, and Chestnut. In 1984-85, 216 non-Hispanic magnet students were enrolled at these three schools, an increase of 146 (209%). Projections for next year are for an enrollment of 377 non-Hispanic magnet students which would be an increase of 300 (390%). More importantly, the acceptance of these students (together with acceptance of Hispanic students out of District VI to White Street, Sixteen Acres, and Van Sickle) has improved the racial balance at these three schools. Percent Hispanic from 1982-83 to 1984-85 decreased at Brightwood from 77% to 72%, at Lincoln from 88% to 81%, and at Chestnut, from 79% to 75%.

3. An improved gender and racial balance in the high schools.

Springfield has expended much time, effort, and money in the attempt to improve the gender and racial balance in Springfield high schools. For the most part, the focus has been on writing new programs for the new high school or revising curriculum for the high schools. While some of the new programs have been initiated, others must await the opening of the new Springfield Central High School in September, 1986, which will combine the present Classical and Technical High Schools. Therefore, there has as yet been little impact made at accomplishing this objective.

Classical High School, for example, has been less integrated, with 70% white enrollment in 1982-83, but a 75% white enrollment in 1984-85. Similarly, the percentage of non-white students at Tech increased from 48% in 1982-83 to 51% in 1984-85, while Hispanic percentage increased from 29% to 32%. Commerce also had higher minority enrollment in 1984-85 (70%) than in 1982-83 (67%). Only at Putnam was there an improvement in racial balance over the three year period (58% white, 26% non-white, and 16% Hispanic in 1982-83 to 55% white, 25% non-white, and 20% Hispanic in 1984-85).

Concerning gender imbalance, there has been some success in increasing the percentage of males attending Commerce. Male percentage at Commerce increased from 26% in 1982-83 to 36% in 1984-85. The percentage of females attending Putnam has not changed over three years, maintaining a level of 33%.

4. Increased participation of parents and teachers in the Chapter 636 Process.

A concerted effort at involving more parents in the Chapter 636 needs assesment/proposal development process was undertaken in 1983-84 resulting in an increase in parent involvement from 283 in 1982-83 to 435 in 1983-84. This involvement was not sustained this year, however, as only 277 parents were involved in this process. However, there has been a sizable increase in parent involvement in the evaluation of Chapter 636 programs over the three year period, from 628 during the first year to 910 this year, an increase of 282 (45%). The results above are depicted in Graph A7. Teacher participation remains high on the elementary level where teachers are generally very satisfied with their opportunities for input (6.08 success rating on a 7 point scale). Secondary classroom teacher participation, however, has room for improvement, as secondary teachers remain far less satisfied with their opportunities for involvement (4.68 success rating on a 7 point scale).

5. Increasing the integration of students.

Cross-racial friendships on the elementary school level continue to increase, a sign of improved integration (see Graph A8). Over the three year period cross-racial selections increased from 38% of all selections to 44% of all selections.

Recommendations

1. Parent involvement in the Chapter 636 needs assessment and proposal development process declined this year after a very successful year in 1983-84. Much effort on the part of principals and teachers still remains to be accomplished in order to encourage regular participation by significant numbers of parents in this process.
2. Chapter 636, a program designed to improve the quality of integrated education, has consistently had few minority staff persons. A continued committment must be made to seek and to hire qualified minority staff for any newly created positions in Chapter 636.

TABLE A1

Chapter 636 Allocations: Nine-Year Comparison

School	76-77	77-78	78-79	79-80	80-81	81-82	82-83	83-84	84-85
ELE:									
ARM	20,421	80,830[a]	66,048	67,772	61,857	59,081	58,881	61,858	63,161
BAL	12,297	17,420	14,418	16,587	14,677	2[illegible],134	24,368	23,055	22,910
BEA	45,660[a]	40,994	41,717	28,180[b]	22,401	18,470	18,365	17,728	18,238
BOW	18,463	29,639	28,222	28,046	26,775	28,335	30,353	33,821	29,481
BRI	68,320[a]	77,453	70,144	69,699	63,421	59,340	49,702	53,007	52,596[d]
BRO	26,504	37,014	31,161	35,010	29,947	32,560	35,922	42,201	39,714
BRU	25,666	42,718	33,706	41,495	36,729	35,872	32,405	31,033	31,773
DEB	15,256	25,358	19,928	24,438	20,109	20,039	21,237	23,507	23,056
DOR	16,390	22,072	16,817	20,639	20,775	20,117	20,090	21,219	22,737
EAS	------	------	------	3,500	4,913	------	------	1,062	1,987
ELL	8,110	13,764	12,731	12,282	36,134[a]	1,375[b]	21,290	13,990	13,781
FRE	20,200	28,458	24,904	25,514	24,188	24,512	26,591	25,590	22,478
GLE	11,648	24,242	16,371	22,665	19,716	21,863	26,505	26,595	28,298
GLI	14,990	26,536	21,730	25,387	26,200	25,955	31,122	30,663	30,891
HAR	19,760	27,404	23,463	23,235	24,890	24,887	24,539	23,623	21,959
HOM	19.100	29,134	22,930	24,184	22,085	20,510	20,948	22,807	19,711
HOW	21,921	31,738	27,310	30,641	24,247	30,560	25,223	31,495	29,806
IOE	15,370	25,482	21,466	23,488	23,777	33,463	28,558	32,099	29,048
KNS	17,447	25,952	23,100	50,898[a]	54,263	50,920	50,670	54,360	50,772
LIB	14,885	25,978	20,829	23,741	24,719	21,176	23,769	22,124	23.461
LIN	62,775[a]	60,554	61,583	64,729	69,646	66,317	52,096	58,603	56,883
LYN	12,750	21,204	17,225	18,169	16,998	18,030	22,145	20,326	21,921
MEM	10,452	19,158	16,218	17,157	17,685	19,685	16,502	17,745	18,242
MOR	6,870	8,929	8,705	9,623	9,531	------	------	------	------
MYR	17,664	26,958	17,914	19.752	21,091	20,260	------	------	------
NEW	145,013[a]	144,809	146,304	157,535	158,182	139,741	138,000	145,150	147,851
POT	19,810	34,038	28.779	34,631	35,900	39,540	44,546	46,366	44,697
SCH LOC	------	2,728	2,544	2,151	2,293	------	------	------	------
SIX	27,220	43,648	33,800	36,720	33,340	35,483	33,260	33,076	30,432[d]
SUM	15,489	52,882[a]	49,662	57,122	58,428	55,174	55,424	61,024	60,008
TAL	16.250	26,970	22,472	22,796	22,410	21,339	22,914	24,275	23,688

Page 2 TABLE A1 Chapter 636 Allocations: Nine-Year Comparison

School	76-77	77-78	78-79	79-80	80-81	81-82	82-83	83-84	84-85
ELE:									
TAP K	2,000	4,650	4,081	2,976	2,417	------	------	------	------
TAP RC	------	5,270	4,400	7,230	5,400	------	------	------	------
WAR	61,540[a]	54,380	52,226	41,129	51,847	49,192	51,542	57,208	54,618
WAS	25,800	42,222	31,800	37,353	33,035	33,060	36,418	38,857	30,815
WHI	17,600	27,342	23,850	26,934	26,593	42,330[a]	65,478	55,889	25,072[b]
Ele Tot	853,611	1,207,925	1,058,558	1,153,408	1,148,619	1,089,220	1,108,863	1,157,356	1,090,075
SEC:									
ALT	------	70,600	55,053	30,000	30,000	------	------	1,164	1,506
CHE	11,038	23,265	17,090	19,827	22,205	31,386	79,965[a]	81,136	78,538
DUG	11,070	19,522	16,941	18,066	17,209	19,725	19,910	24,978	25,208
FOR	13,072	21,844	9,150	20,064	17,100	29,412	22,738	22,177	21,944
KEN	8,090	15,055	12,291	14,200	14,473	57,214[a]	18,891[b]	16,067	16,177
KIL	13,470	24,787	21,590	22,950	21,700	36,305	30,015	31,241	29,164
VAN	11,900	24,138	19,873	22,998	17,544	26,130	65,641[a]	61,023	63,998
CLA	20,177	35,542	31,137	30,651	38,550	49,994	42,773	39,213	42,596
COM	16,748	16,207	16,400	33,217	35,313	41,817	35,440	34,137	33,464
JESI	------	------	------	1,300	------	------	------	------	------
PUT	15,031	27,689	25,600	------	30,567	43,875	40,201	39,341	31,688
TEC	16,158	31,573	23,866	25,578	24,384	31,347	25,180	24,908	21,855
Sec Tot	136,754	310,222	248,991	238,851	269,045	367,205	380,784	375,385	366,138

Page 3 TABLE A1 Chapter 636 Allocations: Nine-Year Comparison

School	76-77	77-78	78-79	79-80	80-81	81-82	82-83	83-84	84-85
Staff Dev	50,000	------	50,000	50,000	------	------	------	9,500	------
C/W Tec	------[c]	52,500	50,437	50,728	58,532	49,150	------	------	------
Cent. Off	50,000	63,500	92,380	110,000	117,300	120,989	113,784	102,988	113,267
Compet/Misc	203,250	------	97,955	55,000	142,708	22,934	------	------	------
Add Alloc	------	------	------	------	------	------	------	------	121,476[e]
Magnet Plan	------	------	------	------	------	------	79,558	109,696	90,010
New Deseg	------	------	------	------	------	------	------	------	77,790
TOTAL	1,293,615	1,634,147	1,622,701	1,657,987	1,736,204	1,649,589	1,682,989	1,754,925	1,858,756

[a] First year as a magnet school

[b] Phased out as a magnet school

[c] Included in competitive proposals

[d] Additional funding also included under new desegregation

[e] Supplementing school allocations above and providing for staff development

TABLE A2

Number of Parents Who Participated in Chapter 636
Needs Assessment Proposal Development
(According to Principals)
Seven-Year Comparison

	School	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85
Elem:	Arm	5	7	5	n/a	6	12	6
	Bal	6	14	12	n/a	n/a	12	15
	Bea	50	25	3	n/a	7	15	8
	Bow	3	12	6	6	6	17	9
	Bri	n/a	8	4	n/a	3	15	5
	Bro	3	2	7	5	10	10	4
	Bru	4	4	4	1	2	20	22
	DeB	6	12	6	6	10	10	6
	Dor	5	6	6	3	3	3	4
	Ell	3	6	2	3	3	3	3
	Fre	3	3	5	4	5	6	6
	Gle	3	4	3	5	4	5	2
	Gli	3	2	6	n/a	5	3	3
	Har	n/a	4	4	3	8	3	3
	Hom	3	4	5	3	3	6	6
	How	12	40	36	13	38	26	30
	IOE	n/a	8	5	3	4	20	3
	Kns	4	n/a	27	6	13	15	8
	Lib	n/a	8	5	3	3	4	5
	Lin	3	n/a	14	n/a	45	15	4
	Lyn	6	6	8	6	8	31	12
	Mem	10	40	10	8	12	20	15
	Mor	3	n/a	4	---	---	---	---
	Myr	n/a	6	7	3	---	---	---
	New	n/a	n/a	10	10	10	12	3
	Pot	5	6	9	6	6	6	17
	Six	4	6	5	6	4	6	6
	Sum	n/a	27	5	5	4	12	4
	Tal	4	3	5	5	5	11	8
	Tap	n/a	2	---	---	---	---	---
	War	5	13	5	4	3	3	15
	Was	7	4	6	3	4	4	4
	Whi	n/a	6	6	5	12	12	13
Elem:	Total Reported	160	288	245	125	246	337	249
Elem:	Ave/School Reported	6.7	10.2	7.7	5.0	8.5	11.2	8.3
Sec:	Alt	3	2	---	---	---	---	---
	Che	n/a	5	5	0	10	50	3
	Duq	3	8	12	4	10	10	4
	For	3	6	5	n/a	n/a	3	3
	Ken	n/a	n/a	3	n/a	n/a	4	3
	Kil	n/a	20	11	4	4	3	4
	Van	n/a	46	10	5	4	4	4
	Cla	n/a	9	5	4	3	10	2
	Com	3	47	5	8	3	5	2
	Put	3	---	20	4	3	8	3
	Tec	n/a	2	5	2	n/a	1	0
Sec:	Total Reported	15	145	81	31	37	98	28
Sec:	Ave/School Reported	3.0	16.1	8.1	3.9	5.3	9.8	2.8

n/a = not available

TABLE A3

Chapter 636 Staff

By Race and Sex

1984-85

	Male			Female			Total		
Type	W	NW	H	W	NW	H	W	NW	H
Professional	10	0	0	52	5	0	62	5	0
Paraprofessional	0	1	0	22	4	6	23	5	6

TABLE A4

Census of Chapter 636 Professional and Paraprofessional Staff

Nine-Year Comparison

Type	76-77	77-78	78-79	79-80	80-81	81-82	82-83	83-84	84-85
Professional	119	96	82	82	81	72	70	66	67
Paraprofessional	83	102	55	70	64	43	37	34	34
TOTAL	202	198	137	152	145	115	107	100	101

TABLE A5

Racial Distribution of Chapter 636 Professional Staff

Eight-Year Comparison

Race	77-78	78-79	79-80	80-81	81-82	82-83	83-84	84-85
White	85%	91%	88%	85%	89%	89%	89%	93%
Black	13%	8%	12%	14%	10%	11%	11%	7%
Hispanic	2%	1%	0%	1%	1%	0%	0%	0%

TABLE A6

Racial Distribution of Chapter 636 Paraprofessional Staff

Eight-Year Comparison

	77-78	78-79	79-80	80-81	81-82	82-83	83-84	84-85
White	78%	89%	83%	81%	77%	86%	79%	68%
Black	10%	7%	13%	14%	14%	0%	9%	15%
Hispanic	12%	4%	4%	5%	9%	14%	12%	18%

Graph A1

CHAPTER 636 STAFF
RACIAL DISTRIBUTION

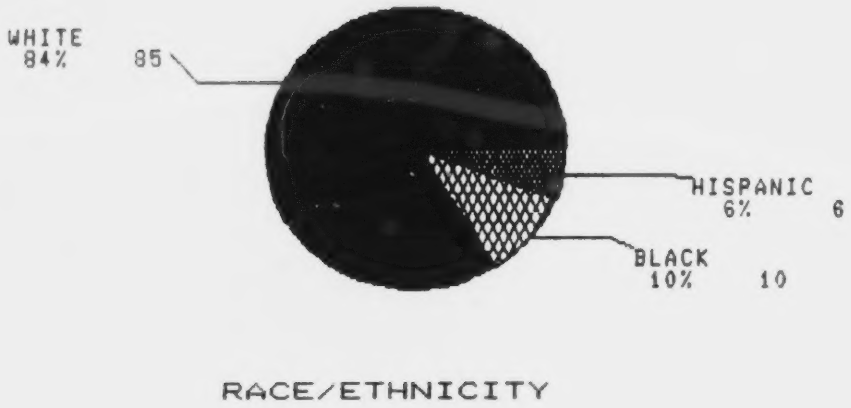
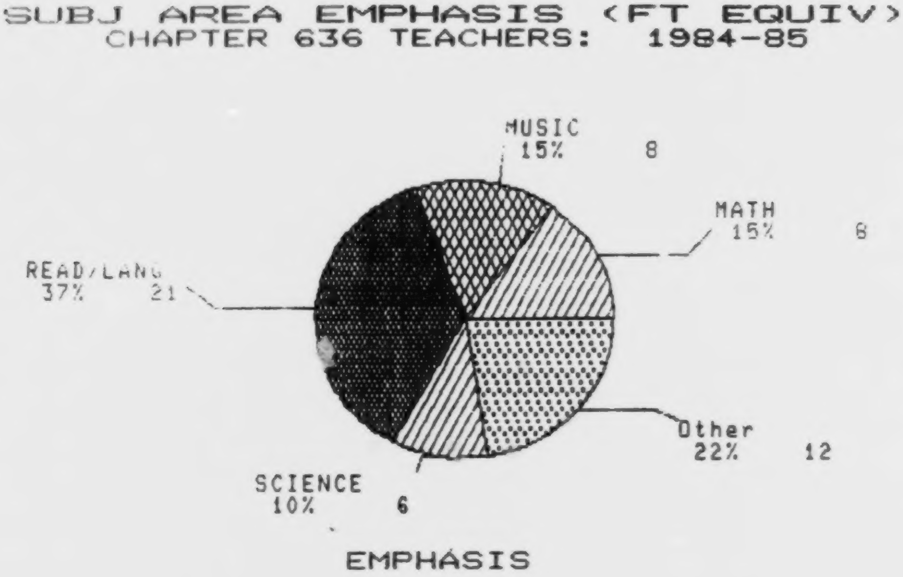


TABLE A7

Subject Area Responsibilities of Chapter 636 Teachers
Full-Time Equivalents

School	Art	Career Awareness	Foreign Language	Full-Day Kindergarten	In-House Suspension	Math	Music	Reading/Language Arts	Science	Social Studies	Theatre Arts	Full-Time Equivalent	Actual Positions
Arm						1.5		1.0				2.5	3
Bal								0.5				0.5	1
Bea								0.5				0.5	1
Bow						0.2		0.5	0.1	0.2		1.0	1
Bri				1.0			0.5	1.0				2.5	4
Bro						0.2		0.8				1.0	1
Bru						0.3	0.5	0.7				1.5	3
DeB							0.4	0.4			0.1	0.9	2
Dor							0.2	0.2	0.5			0.9	2
Ell							0.3	0.2				0.5	1
Fre	0.5						0.4	0.5				1.4	3
Gle					1.0		1.0	0.5				2.5	3
Gli								1.2				1.2	2
Har	0.5						0.5					1.0	2
Hom						0.2	0.4	0.4				1.0	2
How	0.2							0.8				1.0	1
IOE								0.5				0.5	1
Kns							0.5	1.0	0.4			1.9	3
Lib						0.2		0.3				0.5	1
Lin						0.5	0.5	0.5				1.5	2
Lyn								1.0				1.0	1
Mem						0.2		0.5				0.7	1
New	1.0					1.0	1.0	1.0	1.0		0.1	6.0	6
Pot	0.5						0.5		1.0			2.0	3
Six			0.8			0.9	0.2	1.4				3.3	5
Sum			0.4			1.1	0.5	0.5				2.5	3
Tal						0.2	0.2	0.4				0.8	2
War	0.5					1.0	0.5	0.5				2.5	4
Was								0.6				0.6	1
Whi			0.3				0.5	0.6	0.2			1.6	3
Che		1.0				1.0			1.0			3.0	3
Dug						0.2			0.8			1.0	1
For									1.0			1.0	1
Ken												0.0	0
Kil		0.5										0.5	1
Van		0.5	0.4		1.0		0.2					2.1	4
Cla								1.5				1.5	2
Com								1.0				1.0	1
Put					1.5			0.5				2.0	2
Tec												0.0	0
Full-Time Equiv.	3.2	2.0	1.9	1.0	3.5	8.7	8.8	21.0	6.0	0.2	1.1	57.4	83
Schools	6	3	4	1	3	15	19	31	9	1	2	----	--

Graph A2



SUBJ AREA EMPHASIS (FT EQUIV)
CHAPTER 636 TEACHERS: 1984-85

TABLE A8

Subject Area Emphasis of Chapter 636 Teachers

Full-Time Equivalents

Eight-Year Comparison

	Full-Time Equivalents								Percent of Total Emphasis							
Subject Area	77-78	78-79	79-80	80-81	81-82	82-83	83-84	84-85	77-78	78-79	79-80	80-81	81-82	82-83	83-84	84-85
Art	2.5	2.0	4.0	3.1	2.9	3.3	3.1	3.2	3	3	6	4	5	6	6	6
Attendance	---	---	---	---	1.0	1.0	---	---	--	--	--	--	2	2	--	--
Career Awareness	---	0.2	---	---	---	2.0	2.0	2.0	--	0	--	--	--	3	4	3
Counseling	4.4	4.0	1.0	0.5	0.5	0.5	---	---	5	5	1	1	1	1	--	--
Foreign Language	4.5	2.5	2.5	3.4	2.6	1.8	1.8	1.9	5	3	3	5	4	3	3	3
Full-Day Kindergarten	---	---	---	---	---	---	0.5	1.0	--	--	--	--	--	--	1	2
In-House Suspension	5.0	5.0	4.0	6.0	5.0	4.0	3.5	3.5	5	7	6	8	8	7	6	6
Library	1.7	1.5	0.7	---	---	---	---	---	2	2	1	--	--	--	--	--
Math	12.6	8.6	9.4	9.6	6.9	7.6	8.5	8.7	14	11	13	14	11	13	15	15
Music	10.5	9.7	9.5	11.1	5.5	7.4	6.4	8.8	11	13	13	16	9	13	11	15
Physical Education	10.5	8.6	7.1	---	---	---	---	---	11	11	10	--	--	--	--	--
Read/Lang	33.8	27.1	28.3	28.5	31.5	26.2	23.7	21.0	37	35	39	40	50	44	42	37
Science	2.7	2.6	2.9	4.9	4.3	4.1	5.4	6.0	3	3	4	7	7	7	10	10
Social Studies	1.8	1.7	1.6	1.2	0.2	0.2	0.4	0.2	2	2	2	2	0	0	1	0
Theater Arts	1.0	2.0	1.5	1.4	1.2	1.1	1.0	1.1	1	3	2	2	2	2	2	2
Other	1.0	1.1	0.5	1.0	2.0	0.0	0.0	0.0	1	1	1	1	3	0	0	0
TOTAL	92.0	76.5	73.0	70.7	63.6	59.2	56.3	57.4	--	--	--	--	--	--	--	--

TABLE A9

Subject Area Emphasis of Chapter 636 Teachers

Number of Schools

Eight-Year Comparison

Subject Area	Number of Schools							
	77-78	78-79	79-80	80-81	81-82	82-83	83-84	84-85
Art	4	3	3	6	6	8	7	6
Attendance	0	0	0	0	1	1	0	0
Career Awareness	0	1	0	0	0	2	3	4
Counseling	6	7	2	1	1	1	0	0
Foreign Language	4	3	3	4	4	4	5	4
Full-Day Kindergarten	--	--	--	--	--	--	1	1
In-House Suspension	2	2	3	5	5	4	3	3
Library	2	2	1	0	0	0	0	0
Math	18	14	15	15	13	14	16	15
Music	14	15	14	15	11	16	15	19
Physical Education	11	11	8	0	0	0	0	0
Reading/Language	29	27	29	29	30	31	30	31
Science	5	4	5	8	7	7	8	9
Social Studies	3	2	3	1	1	1	2	1
Theater Arts	1	2	1	3	2	2	1	2

TABLE A10

Total Number of Students Served by Chapter 636 Teachers By Race and School

vs

School Racial Distribution

School	Teaching Time	Program Area(s)	Number of Students Served				Percent Served			School Percent			Significant Discrepancy
			W	NW	H	Tot	W	NW	H	W	NW	H	
Arm	0.6	Math	32	23	18	73	44	32	25	44	23	33	
	1.0	Read/Lang	247	130	183	560	44	23	33				
	0.9	Math	247	130	183	560	44	23	33				
Bal	0.5	Read/Lang	16	13	1	30	53	43	3	53	44	4	
Bea	0.5	Read/Lang	20	11	4	35	57	31	11	76	18	6	
Bow	1.0	Read/Lang, Math, Science, Social Studies	30	15	27	72	42	21	38	44	22	34	
Bri	0.5	Full Day Kindergarten	10	5	8	23	43	22	35	15	13	72	*
	0.5	Full Day Kindergarten	9	4	10	23	39	17	43				*
	0.5	Music	64	54	304	422	15	13	72				
	1.0	Read/Lang, Math	64	54	304	422	15	13	72				
Bro	1.0	Read/Lang, Math	41	28	15	84	49	33	18	31	29	39	*
Bru	0.5	Music	240	200	15	455	53	44	3	54	44	3	
	0.5	Read/Lang	11	16	1	28	39	57	4				
	0.5	Read/Lang, Math	240	200	15	455	53	44	3				
DeB	0.4	Music	67	154	177	398	17	39	44	17	39	44	
	0.5	Lang/Theater Arts	67	154	177	398	17	39	44				

Page 2 TABLE A10 Total Number of Students Served by Chapter 636 Teachers By Race and School

School	Teaching Time	Program Area(s)	Number of Students Served				Percent Served			School Percent			Significant Discrepancy
			W	NW	H	Tot	W	NW	H	W	NW	H	
Dor	0.2	Music	142	158	46	346	41	46	13	41	46	13	
	0.7	Read/Lang, Science	142	158	46	346	41	46	13				
Ell	0.5	Read/Lang, Music	79	106	34	219	36	48	16	36	48	16	
Fre	0.4	Music	142	96	26	264	54	36	10	54	36	10	
	0.5	Read/Lang	10	14	3	27	37	52	11				
	0.5	Art	142	96	26	264	54	36	10				
Gle	1.0	Music	86	66	170	322	27	21	53	27	21	53	
	0.5	Read/Lang	92	50	83	225	41	22	37				
	1.0	In-House Suspension	4	12	14	30	13	40	47				
Gli	0.6	Read/Lang	152	136	26	314	48	43	8	48	43	8	
	0.6	Read/Lang	18	27	5	50	36	54	10				
Har	0.5	Music	220	64	19	303	73	21	6	73	21	6	
	0.5	Art	220	64	19	303	73	21	6				
Hom	0.6	Read/Lang, Math	19	19	11	49	39	39	22	28	62	10	
	0.4	Music	102	224	37	363	28	62	10				
How	1.0	Read/Lang, Art	88	129	214	431	20	30	50	20	30	50	
IOE	0.5	Read/Lang	26	13	4	43	60	30	9	62	26	13	
Kns	1.0	Read/Lang, Music	255	137	69	461	55	30	15	55	30	15	
	0.4	Science	255	137	69	461	55	30	15				
	0.5	Read/Lang	255	137	69	461	55	30	15				

Page 3 TABLE A10 Total Number of Students Served by Chapter 636 Teachers by Race and School

School	Teaching Time	Program Area(s)	Number of Students Served				Percent Served			School Percent			Significant Descrepancy
			W	NW	H	Tot	W	NW	H	W	NW	H	
Lib	0.5	Read/Lang, Math	75	25	41	141	53	18	29	54	24	22	
Lin	1.0	Read/Lang, Math	81	28	464	573	14	5	81	14	5	81	
	0.5	Music	81	28	464	573	14	5	81				
Lyn	1.0	Read/Lang	40	24	2	66	61	36	3	62	33	5	
Mem	0.7	Read/Lang, Math	41	8	1	50	82	16	2	79	16	5	
New	1.0	Science	286	203	527	1016	28	20	52	28	20	52	
	1.0	Music	286	203	527	1016	28	20	52				
	1.0	Math	286	203	527	1016	28	20	52				
	1.0	Theatre Arts	286	203	527	1016	28	20	52				
	1.0	Art	286	203	527	1016	28	20	52				
	1.0	Read/Lang	191	82	65	338	57	24	19				*
Pot	0.5	Music	208	100	238	546	38	18	44	38	18	44	
	1.0	Science	208	100	238	546	38	18	44				
	0.5	Art	208	100	238	546	38	18	44				
Six	0.6	Read/Lang	7	15	19	41	17	37	46	56	23	22	*
	1.0	Read/Lang, Math	50	19	32	101	50	19	32				
	0.2	Music	276	113	108	497	56	23	22				
	1.0	Foreign Language, Math	276	113	108	497	56	23	22				
	0.5	Read/Lang, Math	276	113	108	497	56	23	22				
Sum	1.0	Math	242	108	90	440	55	25	20	55	25	20	
	1.0	Read/Lang	242	108	90	440	55	25	20				

Page 4 TABLE A10 Total Number of Students Served by Chapter 636 Teachers By Race and School

School	Teaching Time	Program Area(s)	Number of Students Served W	NW	H	Tot	Percent Served W	NW	H	School Percent W	NW	H	Significant Discrepancy
Sum	1.0	Foreign Language, Music, Math	242	108	90	440	55	25	20				
Tal	0.6	Read/Lang, Math	112	72	0	184	61	39	0	54	46	0	
	0.2	Music	157	134	0	291	54	46	0				
War	0.5	Music	191	150	31	372	51	40	8	51	40	8	
	1.0	Math	50	46	16	112	45	41	14				
	0.5	Read/Lang, Math	16	13	7	36	44	36	19				
	0.5	Art	191	150	31	372	51	40	8				
Was	0.6	Read/Lang	11	13	6	30	37	43	20	73	20	6	*
Whi	0.5	Music	198	83	90	371	53	22	24	53	22	24	
	0.8	Read/Lang, Science	198	83	90	371	53	22	24				
	0.3	Foreign Language	0	0	16	16	0	0	100				*
Che	1.0	Math	97	18	65	180	54	10	36	14	10	75	*
	1.0	Science	140	100	728	968	14	10	75				
	1.0	Career Awareness	140	100	728	968	14	10	75				
Dug	1.0	Science	306	348	91	745	41	47	12	41	47	12	
For	1.0	Science	90	80	80	250	36	32	32	65	20	15	*
Kil	0.5	Career Awareness	727	339	25	1091	67	31	2	67	31	2	
Van	0.2	Music	49	38	21	108	45	35	19	39	33	28	
	1.0	In-House Suspension	172	198	152	522	33	38	29				
	0.5	Career Awareness	383	326	272	981	39	33	28				
	0.4	Foreign Language	0	0	24	24	0	0	100				*

Page 5 TABLE A10 Total Number of Students Served by Chapter 636 Teachers By Race and School

School	Teaching Time	Program Area(s)	Number of Students Served				Percent Served			School Percent			Significant Discrepancy
			W	NW	H	Tot	W	NW	H	W	NW	H	
Cla	1.0	Read/Lang	43	16	5	64	67	25	8	75	21	4	
Com	1.0	Read/Lang	17	19	23	59	29	32	39	30	43	27	
Put	1.0	In-House Suspension	214	44	41	299	72	15	14	54	25	20	*

*$P < .01$

TABLE A11

Number of Students Served by Chapter 636 Teachers in Enrichment Programs

By Race and School

vs

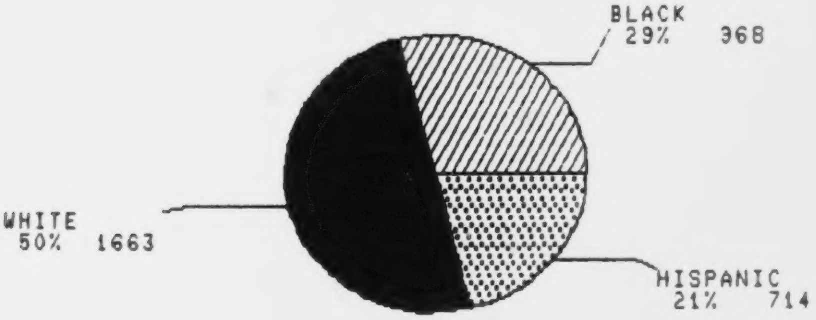
School Racial Distribution

School		Number of Students Served				Percent Served			School Percent			Significant Discrepancy
		W	NW	H	Tot	W	NW	H	W	NW	H	
Arm	Read/Lang	247	130	183	560	44	23	33	44	23	33	
	Math	247	130	183	560	44	23	33				
Bal	Read/Lang	16	13	1	30	53	43	3	53	44	4	
Bow	Read/Lang	23	6	7	36	64	17	19	44	22	34	
Bro	Read/Lang, Math	41	28	15	84	49	33	18	31	29	39	*
Bru	Math	8	6	0	14	57	43	0	53	44	3	
Ell	Read/Lang	79	106	34	219	36	48	16	36	48	16	
Gle	Read/Lang	92	50	83	225	41	22	37	27	21	53	*
Gli	Read/Lang	12	12	1	25	48	48	4	48	43	8	
	Lang	152	136	26	314	48	43	8				
How	Read/Lang	10	30	16	56	18	54	29	20	30	50	*
Kns	Read/Lang	255	137	69	461	55	30	15	55	30	15	
Lyn	Read/Lang	13	6	0	19	68	32	0	62	33	5	
New	Read/Lang	191	82	65	338	57	24	19	28	20	52	*
Tal	Read/Lang, Math	107	58	0	165	65	35	0	54	46	0	
War	Math	25	10	2	37	68	27	5	51	40	8	
	Read	6	4	0	10	60	40	0				
Whi	Read/Lang	37	9	4	50	74	18	8	53	22	24	
Che	Math	91	9	24	124	73	7	19	14	10	75	*
Cla	Read/Lang	5	0	0	5	100	0	0	75	21	4	
Com	Read/Lang	6	6	1	13	46	46	8	30	43	27	
TOTAL		1663	968	714	3345	50	29	21	43	29	28	*

$P < .01$

Graph A3

RACIAL DISTRIBUTION
STUDENTS IN CH 636 ENRICHMENT PROGRAMS



RACE/ETHNICITY

TABLE A12

Number of Students Served by Chapter 636 Teachers

Enrichment Programs

Five-Year Comparison

Year	Number of Students Served				Percent Served			School Percent			Significant Discrepancy
	W	NW	H	Tot	W	NW	H	W	NW	H	
1980-81	1645	731	344	2720	60	27	13	49	27	23	*
1981-82	2655	1349	510	4514	59	30	11	49	27	25	*
1982-83	1029	484	381	1894	54	26	20	40	27	33	*
1983-84	1326	632	500	2458	54	26	20	45	29	26	*
1984-85	1663	968	714	3345	50	29	21	43	29	28	*

*$P < .01$

TABLE A13

Number of Students Served by Chapter 636 Teachers in Basic Skills Programs
By Race and School
vs
School Racial Distribution

School	Program Area(s)	Number of Students Served				Percent Served			School Percent			Significant Discrepancy
		W	NW	H	Tot	W	NW	H	W	NW	H	
Arm	Math	32	23	18	73	44	32	25	44	23	33	
Bea	Read/Lang	20	11	4	35	57	31	11	76	18	6	
Bow	Read/Lang, Math	7	9	20	36	19	25	56	44	22	34	
Bru	Read/Lang	11	16	1	28	39	57	4	53	44	3	
Dor	Read/Lang	3	4	1	8	38	50	13	41	46	13	
Fre	Read/Lang	10	14	3	27	37	52	11	54	36	10	
Gli	Read/Lang	6	15	4	25	24	60	16	48	43	8	
Hom	Read/Lang, Math	19	19	11	49	39	39	22	28	62	10	*
IOE	Read/Lang	26	13	4	43	60	30	9	62	26	13	
Kns	Read/Lang	13	11	1	25	52	44	4	55	30	15	
Lib	Read/Lang, Math	75	25	41	141	53	18	29	54	24	22	
Lyn	Read/Lang	27	18	2	47	57	38	4	62	33	5	
Mem	Read/Lang, Math	41	8	1	50	82	16	2	79	16	5	
Six	Read/Lang	7	15	19	41	17	37	46	56	23	22	*
	Read/Lang, Math	50	19	32	101	50	19	32				
	Math	9	5	6	20	45	25	30				
Tal	Read/Lang	11	16	0	27	41	59	0	54	46	0	
War	Math	25	36	14	75	33	48	19	51	40	8	
	Read/Lang, Math	10	9	7	26	38	35	27				
Was	Read/Lang	11	13	6	30	37	43	20	73	20	6	*
Che	Math	6	9	41	56	11	16	73	14	10	75	
Cla	Read/Lang	38	16	5	59	64	27	8	75	21	4	
Com	Read/Lang	11	13	22	46	24	28	48	30	43	27	*
TOTAL		468	337	263	1068	44	32	25	51	30	20	*

*P < .01

TABLE A14

Number of Students Served by Chapter 636 Teachers
Basic Skills Programs
Five-Year Comparison

	Number of Students Served				Percent Served			School Percent			Significant Discrepancy
Year	W	NW	H	Tot	W	NW	H	W	NW	H	
1980-81	564	614	508	1686	33	36	30	54	32	15	*
191-82	396	455	356	1207	33	38	29	52	32	16	*
1982-83	338	336	238	912	37	37	26	48	31	21	*
1983-84	286	359	180	825	35	44	22	51	30	19	*
1984-85	468	337	263	1068	44	32	25	51	30	20	*

*$P < .01$

Graph A4

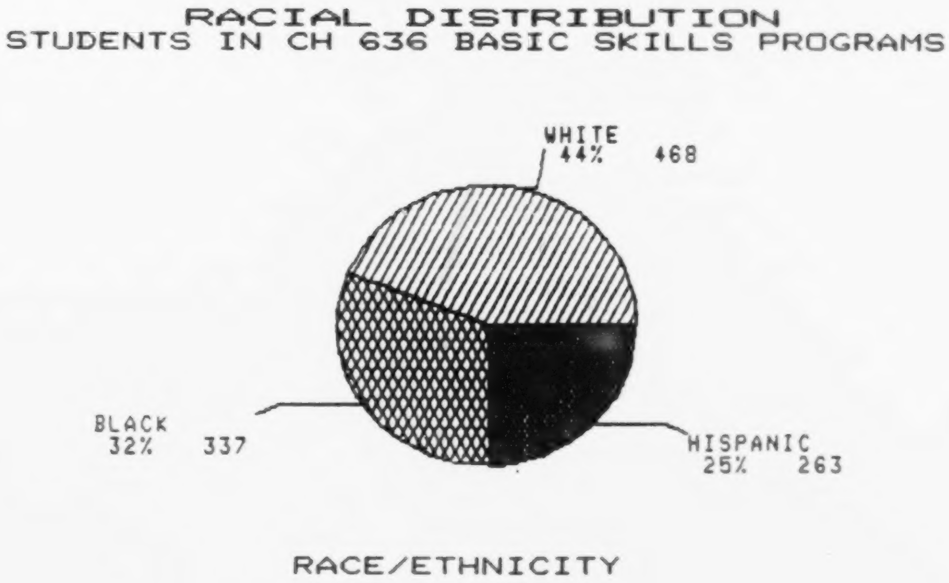

RACIAL DISTRIBUTION
STUDENTS IN CH 636 BASIC SKILLS PROGRAMS
WHITE 44% 468
BLACK 32% 337
HISPANIC 25% 263
RACE/ETHNICITY

TABLE A15

Percentage of Time Spent by Chapter 636 Teacher Aides

on Clerical and Instructional Tasks

Nine-Year Comparison

	Percentage of Time		
Year	Instructional	Clerical	Health
76-77	56%	35%	9%
77-78	58%	36%	6%
78-79	58%	41%	1%
79-80	77%	23%	--
80-81	74%	26%	--
81-82	74%	26%	--
82-83	81%	19%	--
83-84	80%	20%	--
84-85	75%	25%	--

TABLE A16

Ranking of Services Performed by Chapter 636 Teacher Aides

Nine-Year Comparison

Service	Rank 76-77	77-78	78-79	79-80	80-81	81-82	82-83	83-84	84-85
1. Reinforcing teacher-taught skills with small groups.	1	1	1	1	1	1	1	1	1
2. Moving about a classroom assisting students who need help.	3	2	2	2	3	3	1	3	2
3. Tutoring individual students.	4	3	3	3	2	2	3	2	3
4. Correcting student work with students.	2	5	5	4	4	4	4	4	4
5. Preparing instructional materials.	5	4	4	6	6	7	6	5	5
6. Duplicating dittos for student use.	6	6	6	5	5	6	5	6	6
7. Gathering supplementary instructional materials.	12	8	8	10	7	8	7	7	7
8. Correcting papers for the teacher.	7	7	9	7	8	5	9	8	8
9. Helping teachers to communicate to parents with limited English speaking ability.	18	23	13	13	13	14	10	12	9
10. Helping to maintain records for school files.	15	12	12	9	17	15	18	16	10
11. Correcting teacher-made or standardized tests.	17	16	10	8	10	14	16	14	10
12. Contacting parents of children for teachers.	13	15	17	14	16	13	14	15	11
13. Helping to maintain classroom discipline when teacher is temporarily out of classroom.	9	9	7	11	9	9	8	11	12
14. Helping teacher to supervise students during non-classroom activities.	8	14	15	12	11	12	12	10	13
15. Administering teacher-made or standardized tests.	21	24	21	17	17	19	17	13	14
16. Helping to keep the classroom neat and orderly.	12	10	14	11	12	16	12	9	15

TABLE A17

Total Number of Students
Directly Served by Chapter 636 Teacher Aides

School	Number of Aides	Type of Service Regularly Scheduled	Needs Based/ Intermittent
Arm	1	0	0
Bal	2	71	0
Bea	1	20	0
Bow	1	64	0
Bri	1	0	301
Bro	2	88	2
Gle	1	45	0
Gli	1	20	0
How	1	0	0
IOE	2	58	39
Kns	1	27	35
Lib	2	27	252
Lin	3	0	298
New	1	0	0
Six	1	25	0
Tal	1	0	60
Was	2	54	293
Ken	1	5	199
Kil	1	70	22
Van	2	21	522
Tec	2	52	75
TOTAL	30	647	2098
Ave/Aide		21.6	69.9

TABLE A18

Number of Students Directly Served by Chapter 636 Teacher Aides on a Regularly Scheduled Basis by Race and School

vs

School Racial Distribution

School	Number of Aides	Number of Students Served				Percent Served			School Percent			Significant Discrepancy
		W	NW	H	Tot	W	NW	H	W	NW	H	
Bal	2	40	28	3	71	56	39	4	53	44	4	
Bea	1	14	10	2	26	54	38	8	76	18	6	
Bow	1	33	15	24	72	46	21	33	44	22	34	
Bro	2	46	31	23	100	46	31	23	31	29	39	*
Gle	1	6	19	20	45	13	42	44	27	21	53	*
Gli	1	6	15	4	25	24	60	16	48	43	8	
IOE	2	48	20	11	79	61	25	14	62	26	13	
Kns	1	20	13	5	38	53	34	13	55	30	15	
Lib	1	13	16	12	41	32	39	29	54	24	22	
Six	1	11	13	15	39	28	33	38	56	23	22	*
Tal	1	31	30	0	61	51	49	0	54	46	0	
Was	2	75	29	7	111	68	26	6	73	20	6	
Ken	1	2	1	2	5	40	20	40	45	38	17	
Kil	1	35	43	1	79	44	54	1	67	31	2	*
Van	1	0	2	19	21	0	10	90	39	33	28	*
Tec	2	6	27	19	52	12	52	37	17	51	32	
TOTAL	21	386	312	167	865	45	36	19	48	32	20	

*P < .01

TABLE A19

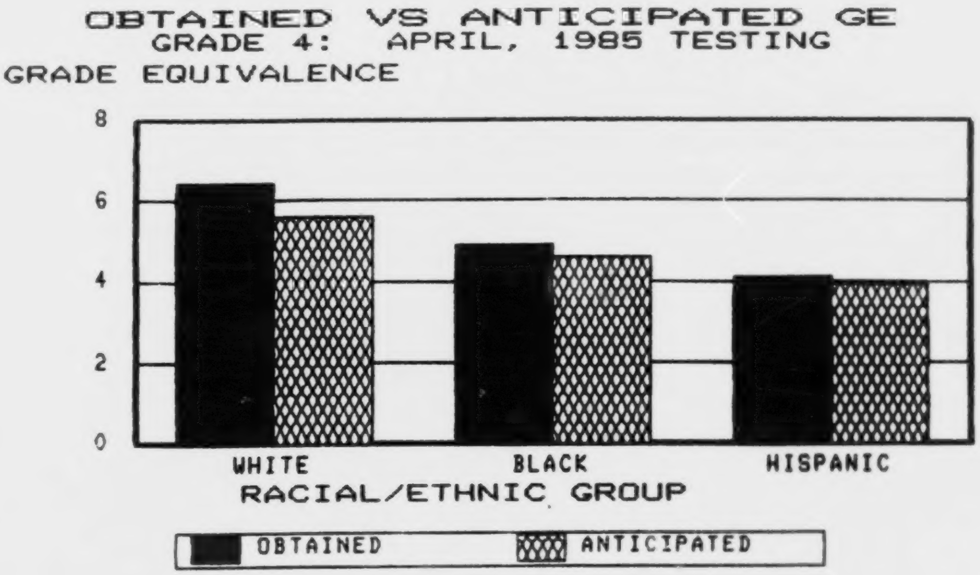
Number of Students Directly Served by Chapter 636 Teacher Aides on a Regularly Scheduled Basis

Five-Year Comparison

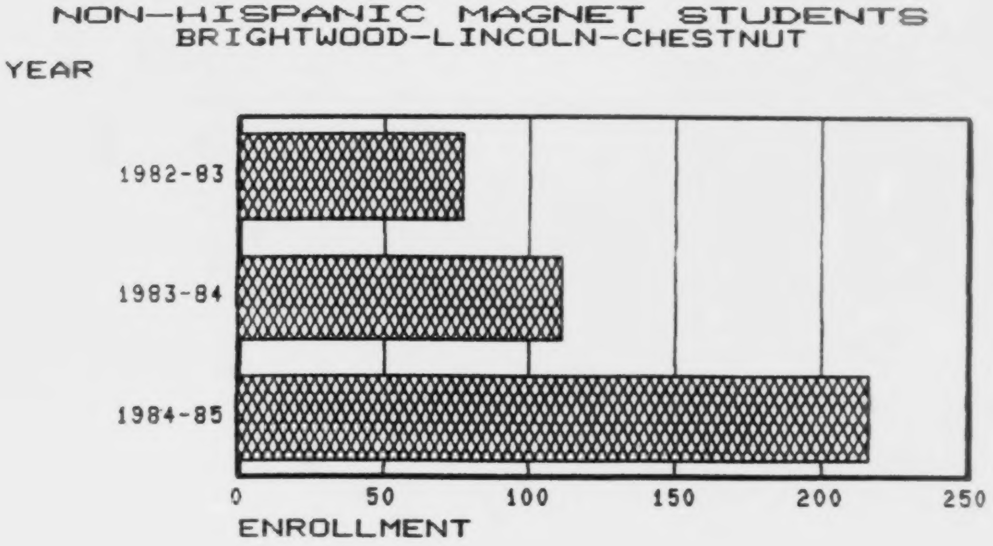
	Number of Students Served				Percent Served			School Percent			Significant
Year	W	NW	H	Tot	W	NW	H	W	NW	H	Discrepancy
1980-81	332	327	171	830	40	39	21	55	29	17	*
1981-82	420	367	689	1476	28	25	47	54	27	19	*
1982-83	915	627	684	2226	41	28	31	50	29	20	*
1983-84	490	401	285	1175	42	34	24	51	32	17	*
1984-85	386	312	167	865	45	36	19	48	32	20	

·P < .01

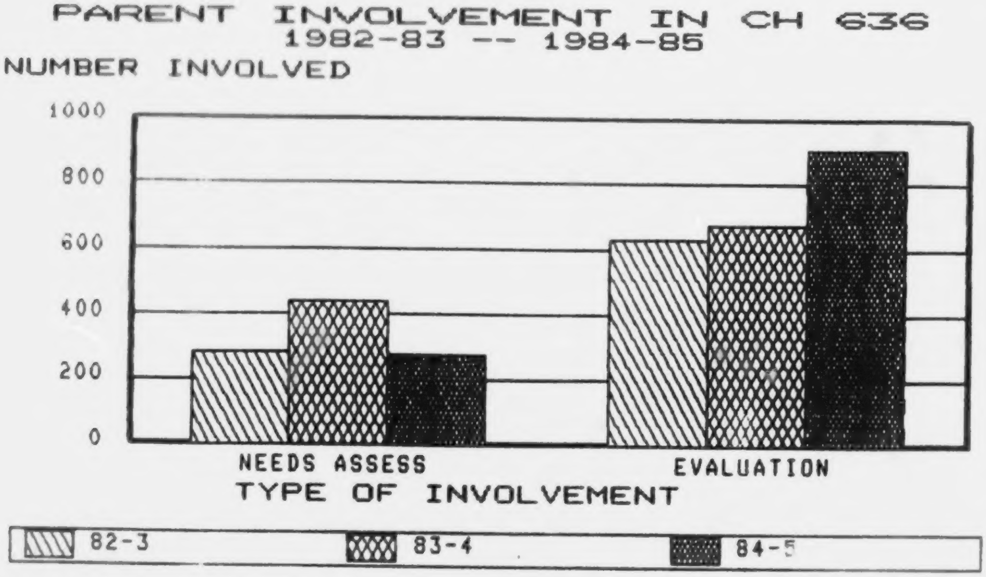
Graph A5



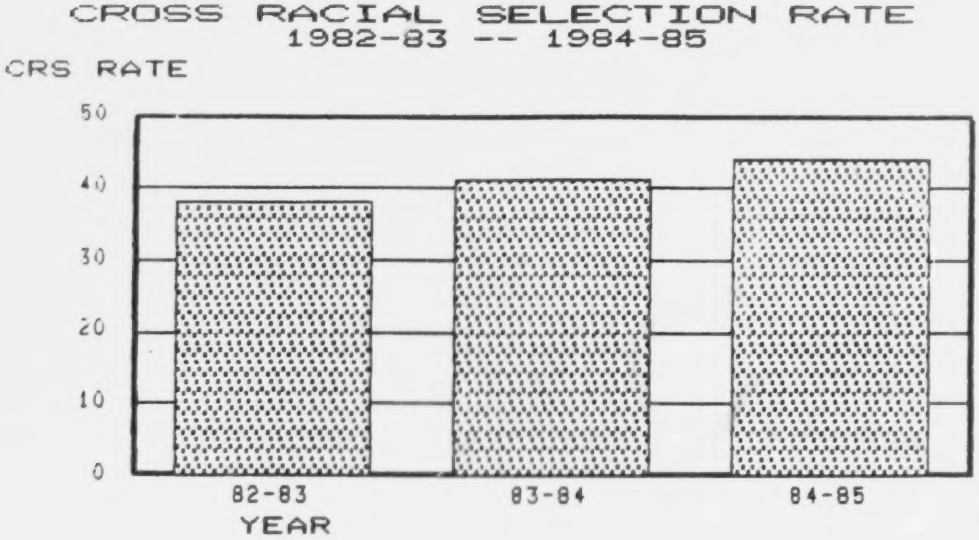
Graph A6



Graph A7



Graph A8



B. Program Evaluation: Academic Programs (Reading/Language Arts, Math)

Chapter 636 funding in 31 schools was allocated for reading/language arts programs. Approximately 40 percent of Chapter 636 program emphasis and funding has been allocated to reading/language arts programs during the past five years. Such programs either provided full or partial basic skills instruction to students reading below grade level, provided full-time basal instruction to regular reading groups of students (enabling smaller group sizes for all teachers during a reading time block), provided enriching experiences for selected students above and beyond the basal program, or provided for a particular program emphasis for the total school (i.e., a reading lab). In some programs, Chapter 636 aides assisted Chapter 636 teachers or classroom teachers by providing reinforcement of instruction.

Primary objective of Chapter 636 remedial, basal, or enrichment programs in reading and math was that eighty percent of the students would show month-for-month or greater grade equivalent gain. A variety of testing instruments were used depending upon the preference of the teachers, ability or grade level of the students, and the availibility of city-wide testing (which was always utilized if possible). Some of the test data is for Fall 1984 - Spring 1985, with expected grade equivalent gain of six or seven months, depending on posttest date (April or May). This year the Metropolitan Achievement Test was administered city-wide in the Spring in grades 3-8 (Survey Total Battery). In many cases, test data from the Metropolitan, given last Spring in selected grades and subjects, was utilized as a pretest, giving expected gain of 10 months (Spring 1984-Spring 1985). Grade 6 students participated in the standardization of the new Metropolitan Achievement Test, and, therefore, results for grade 6 students are not complete. In grades 1-3 the California Achievement Test was used on a fall-spring, pretest-posttest basis. At the high school level, testing included the Gates Reading Test, the Stanford Diagnostic Reading Test and the California Achievement Test.

The majority of the testing results that follow, however, are based on the Metropolitan and have produced some noticeably different outcomes, as no two tests measure in exactly the same manner. In addition, many of the results are for spring-spring testing with different levels within the Metropolitan, not the most ideal pre-post testing situation, which also, in the opinion of this evaluator, has made for some noticeably different results.

Achievement test data for Chapter 636 small group basic skills reading/lanaguage arts programs is presented in Table B1. Thirty-six of forty groups made grade equivalent gains equal to or surpassing expected gains. Positive percentile rank change, and positive NCE differences were also recorded by most groups. Percent of students by groups who had month-for-month grade equivalent gains or better ranged from 20 percent to 100 percent, with twenty-three groups having 80% or more of the students making month-for-month or better grade equivalent gains.

Perhaps the most valid indicator of program success is the NCE statistics. NCE gains of seven or more are considered indications of significant growth which can be assumed to be the result of the intervention, i.e. the special Reading Program. Ten of the tested groups had significant NCE gains. Schools with significant NCE gain included Beal, Brunton, Glickman, Indian Orchard, Memorial, Sixteen Acres, Talmadge, Classical, and Tech. The Chapter 636 remedial-basal reading/language arts programs at these schools, in particular, can be said to have been very successful.

Several of the above programs have had significant NCE gain in one or more groups consistently over the past several years. For example, Beal and Memorial schools have had one or more groups with significant NCE gain over each of the past four years, Indian Orchard has had significant NCE gain five times in seven years, Glickman and Tech six times in seven years, and Classical, seven times in eight years. These programs have been consistently successful over time and are thus worthy of imitation. What are some of the common characteristics of these programs? All the programs on the elementary level provide full instruction in reading every day during a school-wide or grade-wide reading time block (as opposed to supplementary instruction at some other time during the school day). The senior high school programs are each Reading Laboratory Programs using a variety of reading materials, kits, and tapes. These programs are also voluntary, thus asking the students for a personal committment to self-improvement. Several of the programs also involved teacher aides for reinforcement of instruction, a particularly valuable part of the program in the opinion of the project teachers.

Chapter 636 teachers whose groups have consistently recorded significant NCE gain were asked what they felt were some of the essential ingredients for a successful reading skills program. Their responses are listed below:

a. set goals and objectives for each student based on individual strengths and weaknesses

b. organize lesson plans well

c. use a variety of educationally sound materials

d. generate respect of students

e. plan lessons that involve a lot of student participation

f. encourage outside reading

g. provide challenging work for students

h. encourage good attendance

Schools seeking greater reading progress for students might benefit from a close examination of their reading programs in light of the ingredients listed above.

Totally, grade equivalent gain and percent of students achieving expected gain was highest at the senior high school level as students in these programs had better than a one year and seven month average grade equivalent gain in an average six month time period, and as 85 percent of the students achieved at or above expected levels, greater than the 80 percent target figure. Average grade equivalent gain at both the elementary and junior high school level was greater than expected, with 76% of the students on the elementary level and 61% on the junior high school level achieving the expected gain. NCE gain was significant at the senior high school level and almost significant at the elementary level, an indication of a highly successful program this year.

As presented in Table B2, the ratio of obtained grade equivalent gain to expected grade equivalent gain was the highest yet recorded on the elementary and senior high school levels, and equal to last year at the junior high school level. Total grade equivalent gain was twice the expected gain, meaning that in a 10 month school year, the students served gained about 20 months in reading achievement levels, on the average.

According to Table B3, mean NCE gain at the elementary level, close to significance, was the highest ever.

As depicted in Table B4, the percent of students attaining month-for-month grade equivalent gains was the highest ever totally and at both the elementary and senior high school levels, and higher than last year on the junior high school level. Chapter 636 remedial-basal reading/language arts programs are coming closer and closer to the 80 percent objective, as 78 percent of the students this year had grade equivalent gains equal to or greater than expected gains.

Much of what occurred in Chapter 636 Enrichment Reading/Language Programs for students above grade level cannot be measured on achievement tests, as they were experiential in nature. Students in these programs participated in a variety of activities: readings and in-depth discussions of quality children's literature; writing and producing school newspapers, radio broadcasts, and television shows; writing biographies of famous black persons; writing or producing plays and puppet shows; creating trivial pursuit games; participating in spelling bees; writing for the "Children's Magazine", an area student writing publication; and participating in language arts festivals. Nevertheless, the goal was that at least 80 percent of the students would show month-for-month gain, though such gain is difficult or impossible for students scoring near to the upper limits of a testing instrument. Thus percentages are seldom near the 80% figure. Test results for Enrichment Reading/Language Arts Programs are given in Table B5. Most (15 to 21) groups of students in such programs had better than expected grade equivalent gains. Percentile rank gains and NCE gains were also generally positive. Groups at Howard, Lynch, and White, in particular, made significant progress, as shown by NCE differences of 7.0 or more. Percent of students with month-for-month or greater grade equivalent gains ranged from 29 percent to 100 percent. Totally, grade equivalent gains were twice the expected gain and 61 percent of the students recorded month-for-month or greater grade equivalent gains.

The ratio of obtained to expected grade equivalent gain was 2.00, the highest ratio ever (see Table B6). This means that in a 10 month school year, enrichment students had better than a 20 month achievement gain, on the average. Mean NCE change was lower than that recorded last year (see Table B7), as was the percent of students attaining month-for-month gain (see Table B8), inconsistent with the grade equivalent gains reported above. While students in enrichment programs have not as yet attained the 80% gain target figure, the low ceiling of the Metro Achievement Tests prohibits gain in many cases.

Eight schools had Chapter 636 Reading or Language Arts Programs that impacted on an entire school or one or more grade levels within a school.

Examples include reading enrichment programs at Armory and Ells, High Intensity Reading Labs at Brightwood and Lincoln, Language Arts Programs at DeBerry, Glickman and Liberty, and a reading resource teacher program at Sumner. Objective at each school was that 80 percent of the students would attain month-for-month grade equivalent gain. Testing instrument was the Metropolitan Achievement Test (Fall, 1984 - Spring, 1985 or Spring, 1984-Spring, 1985). Mean grade equivalent gain surpassed expected gain at seven of the eight schools (see Table B9). Percent of students attaining month-for-month gain was greatest at Lincoln (73%), which also registered significant NCE gain (+7.4). The benefits from the newly installed Dolphin computer assisted instruction program at Lincoln may have been a factor in the success of the reading program at Lincoln. Totally, grade equivalent gain was almost twice the expected gain while 55% of the students had month-for-month or greater grade equivalent gain.

The ratio of obtained to expected grade equivalent gain for total school reading/language arts programs was the highest rate ever as students had achievement gain better than 1.7 times what was expected (see Table B10). Mean NCE change, however, declined this year (see Table B11), as did the percent of students attaining month-for-month gain (see Table B12), both inconsistent with the large grade equivalent gains recorded.

In addition to an achievement objective, reading programs also had an attitudinal objective, specifically that 80 percent of students would demonstrate an improved attitude toward reading. A locally developed "Reading Attitude Survey" was administered on a pre-post basis to a sample of students in reading/language arts programs in grades five and six. The survey consisted of 20 statements about reading with 5 possible responses ranging from "Strongly Agree" to "Strongly Disagree" with a possible score range of 20 to 100. The instrument has a reliability co-efficient of better than 0.80. A higher score on the survey is indicative of a more positive attitude toward reading. Results of the survey, as shown in Table B13, indicates that there was a slight positive change in student attitude toward reading, though this change was not significant. Two of the schools had a significant change in student attitude toward reading, one positive, one negative, and four of the schools recorded positive change in reading attitude.

According to Table B14, half of the students demonstrated a positive attitude change, with the greatest percent showing improvement at Washington (93 percent). The objective of 80 percent showing improved attitude was not met totally and was met individually at only one school.

Compared to the previous two years, in which this same instrument was utilized, mean raw score change was greatest this year (see Table B15). Score change also came closest to significance this year. The percentage of students showing improved attitude this year was higher than that of last year, as presented in Table B16, though there is still some room for improvement in attempting to turn students on to reading more and to enjoying more of what they read.

Students in the reading lab program at Classical completed a survey prepared by their teacher at the end of the school year to determine their perceptions of the value of the program. As indicated in Table B17, most students felt very strongly that the program had been beneficial to them. Perceptions were comparable to those of last year, though the program seemed to have a greater impact on student grades this year as 94% indicated that their grades had improved compared to 86% last year.

Also at Classical, a Chapter 636 program emphasized writing. Objective of the program was that 80 percent of the students would demonstrate improved writing performance. To measure the effects of this program, a writing sample was administered to a sample of students at the beginning and end of the writing course. Student papers were then coded by the evaluator so that is was impossible to determine pre from post. Each paper was scored holistically by a teacher in the Central Office with experience scoring minimum competency tests. Score range on the individual holistic scoring ran from 4 (Very Good) to 1 (Very Poor). Analysis of differences between the pre and post scores indicates that there was a significant improvement in writing performance (see Table B18). In fact, raw score gain was the highest ever. In addition, sixty-two percent of the students had improved writing performance from pretest to posttest, less than the 80% target but the highest percentage in four years.

Students in the writing/study skills program were asked to complete a survey at the conclusion of the program to determine their perceptions of the value of the program. Results, as presented in Table B20 and B21, were positive. More than three fourths of the students felt that they had improved writing and study skills as a result of the program, that these skills were useful to them in their coursework, and that they would recommend the program to a friend having difficulty in school, though only 70% felt that their grades had improved as a result of the program. Student overall rating was "Good" and slightly higher than that in the previous year in which the survey was taken.

Classroom teachers at schools with Chapter 636 Reading Skills Programs were asked to evaluate the success of these programs, in their estimation, at achieving certain objectives. The rating scale was a seven point continuum ranging from 1: (Very UNsuccessful) to 7: (Highly Successful), the midpoint 4.0 (see Table B22). Most successful objectives, according to teachers, were improving student achievement levels and providing students with more "time on task" in reading, both with ratings of better than 6.0. Least successful objective (though with a rating of 5.73) was reducing the disparity in achievement betwen majority and minority students , although only at two schools was the rating on this objective less than 5.0. By school, ratings on all five objectives exceeded 6.0 at thirteen schools and were less than 5 on any objective at only four schools. In the opinion of classroom teachers, Chapter 636 reading skills programs were very successful this year.

Classroom teacher perceptions of Chapter 636 Reading Enrichment Programs were likewise very positive (see Table B23). Five objectives had mean ratings of 6.0 or greater. The most successful objective was providing more enrichment experiences than classroom teachers could provide. Least successful objective was reducing disparity, though at only two schools was the rating below 5.0. Three schools had ratings exceeding 6.0 on all seven objectives while six schools had ratings of 5.0 or better on each objective.

In Table B24, classroom teacher perceptions of Language Skills Improvement Programs are presented. Ratings for each objective exceeded 5.0. The most successful was enhancing student self-esteem through more successful experiences in language arts. Least successful objectives were increasing student enthusiasm and reducing disparity. In only three instances were ratings lower than 5.0.

Perceptions of classroom teachers regarding Chapter 636 Language Arts Enrichment Programs are presented in Table B25. Teacher perceptions of these programs were very positive as ratings on five of the six objectives exceeded 6.0. Most successful objective was providing more enrichment experiences for students than classroom teachers could provide. Least succesful objective, with a rating of 5.61, was increasing student exposure to the contributions of other cultures to language. Ratings at individual schools exceeded 5.0 in all but one instance, an indication of the uniformity of success of these programs in all the schools.

According to the results in Table B22-B25, Chapter 636 programs in reading and language arts, both basic skills and enrichment, were very successful this year, in the opinion of classroom teachers.

Chapter 636 funding in 15 schools this year was allocated for math programs. Programs were of either basic skills, enrichment, or total school design. As in reading, objective of all math programs was that 80 percent of the students served in math would show month-for-month or greater grade equivalent gains. Some Chapter 636 teachers provided instruction for students in math during a school's scheduled math block of time for less than one-half of the school year, thus meaning smaller group sizes and more individualization for all students, while other teachers provided part-time or strictly supplemental instruction. In some programs a Chapter 636 teacher aide provided reinforcement at the direction of a Chapter 6?5 or city teacher.

Achievement test data for Chapter 636 small group basic skills math programs is presented in Table B26. Only five groups of students at the various schools had grade equivalent gains equal to or exceeding expected gains and positive percentile rank changes and NCE differences. The percent of students with month-for-month or better grade equivalent gains ranged from 0 percent to 79 percent. Only one school, Homer, had significant NCE differences. Totally, mean grade equivalent gain was two months less than expected, and both percentile and NCE change was negative. In addition, only 48% of the students met or exceeded the expected gain, far less than the 80 percent target. Compared to previous years, the ratio of obtained to expected grade equivalent gain, 0.78, was the lowest in seven years (see Table B27). Mean NCE change was also the lowest ever (see Table B28). The percent of students with month-for-month or more grade equivalent gain was likewise the lowest in six years (see Table B29). Chapter 636 basic skills math programs, at least based upon the results above, were not particularly successful this year. While this lower level of success could be attributed to less successful programs, the change in testing to the Metropolitan (which may not be as sensitive to the mathematics curricuium taught in Springfield) and to Spring-Spring testing using different levels of the Metropolitan could also be factors. In any case, teachers and principals at schools with Chapter 636 math skills programs might wish to closely examine their programs to determine whether or not these programs are adequately meeting the needs of their students.

A few schools offered enrichment math programs for above average students in math. As with enrichment reading programs, much of what was learned in math enrichment programs cannot truly be measured on an achievement test, particularly when students score near to the upper limits of the new Metropolitan testing instrument where little or no achievement gain is possible. Students in Chapter 636 math enrichment programs participated in a number of activities including writing computer programs in BASIC and LOGO, operating a school store, learning about stocks and visiting the New York Stock Exchange, keeping checking accounts and savings accounts, and creating geometric designs.

Results of achievement testing for students in enrichment mathematics programs is shown in Table B30. Grade equivalent gain for all seven groups was equal to or greater than expected. Only three of the seven groups had positive percentile and NCE change. Only at Sixteen Acres did more than 80 percent of the students have grade equivalent gain equal to or greater than expected, while 53 percent, totally, improved at a level equal to or greater than expected. It should be noted that in many cases, students initially at the PHS level could not demonstrate any grade equivalent gain (despite raw score gain), giving a lower percentage improvement rate.

Compared to previous years, enrichment math programs, at least on the surface, do not appear to have been as successful in the past two years, though, in the opinion of this evaluator, this is in part due to the more limited range of the Metropolitan Achievement Test. According to the results in Table B31, the ratio of obtained to expected grade equivalent gain, 1.56, was higher than that of last year. The ratio of 1.56 means that enrichment math students this year had a grade equivalent gain of better than 15 months, on the average. NCE gain was also higher than last year, but the percent of students attaining month-for-month gain was the lowest ever (see Tables B32 and B33).

Five schools allocated Chapter 636 funding for math programs that would impact on an entire school. For example, at Armory, Brookings, Liberty, and Sumner, a teacher and/or aide coordinated an assessment and prescriptive program while at Lincoln all students visited the High Intensity Math Center for individual help and also regularly used Dolphin, a computer assisted instruction software package. To measure the impact of such programs, an entire grade was tested with the Metropolitan Mathematics Subtest. Spring-Spring testing was utilized this year for the first time, with different levels of the MAT used for pretest and posttest.

Test results for the above programs is presented in Table B34. At three of the five schools, grade equivalent gain equalled or exceeded expected gain, but at only two schools was percentile rank or NCE change positive. Most successful program was at Lincoln, with average grade equivalent gain of 15 months, percentile rank gain of 8 points, NCE gain of 4.2, and with 69% of the students improving at the expected rate. The Dolphin computer software package, utilized by all students on a regular weekly basis throughout the year last year, may have been a factor in the success of the Lincoln program.

Totally, average grade equivalent gain equalled the expected gain, but percentile rank change was negative as was NCE change, and only 48% of the students had the expected grade equivalent gain.

Compared to previous years, Chapter 636 total school math programs were less successful this year. For example, the ratio of obtained to expected grade equivalent gain was 1.00, matching the lowest figure ever (see Table B36). Mean NCE change was the lowest ever (see Table B36). Finally, the percent of students attaining month-for-month gain was also the lowest in six years (see Table B37).

In addition to an achievement objective, math programs had an additional objective, specifically that 80 percent of students would demonstrate an improved attitude toward math. A locally developed "Math Attitude Survey" was administered on a pre-post basis to a sample of fifth and sixth grade students in Chapter 636 Mathematics programs. The survey consisted of 18 statements about math with 5 possible responses ranging from "Strongly Agree" to "Strongly Disagree" with a possible score range of 18 to 90. The instrument has a reliability coefficient of better than 0.80. A higher score on the survey is indicative of a more positive attitude toward math. Results of the survey, as shown in Table B38, indicate that, totally, there was no change in student attitude toward math. One school had positive attitude change (though not significant), while one school had negative attitude change (also not significant). The percent of students showing improved attitude was 28 percent at one school and 46 percent at the other school, averaging at 40 percent (see Table B39). Compared to previous years, this percent was the lowest ever (see Table B40). The majority of students in Chapter 636 math programs, according to this measure, have not shown any change in attitude toward mathematics. There appears to be a need to provide more enjoyable experiences in mathematics programs so that the students develop more positive feelings about math along with improved achievement levels.

A sample of students who participated in the Chapter 636 Math/Computer lab programs at Chestnut and New North completed evaluation forms this year in order to determine student perceptions of these programs. According to the results presented in Table B41, students had very positive feelings about both programs. Totally, more than 85% of the students indicated that they enjoyed visiting the lab, that they learned a lot about computers, that they enjoyed math more because of the program, that they would like to visit more often, that they would like to work with computers when they get older, and that they enjoyed writing computer programs.

Teachers at schools with Chapter 636 Math Skills Improvement Programs or Math Enrichment Programs were asked to rate the success of these programs in attaining certain objectives. According to Table B42, classroom teachers felt very strongly that the math skills programs met each of the six objectives, as mean success ratings for each objective exceeded 6.0. Most successful objective was providing students with more "time on task" in math followed by increasing student achievement levels. At nine of fifteen schools, teacher success ratings on all five objectives exceeded 6.0, while in only five instances were ratings below 5.0.

Classroom teacher perceptions concerning the success of Chapter 636 Math Enrichment Programs were also positive (see Table B43). Mean success ratings approached or exceeded 6.0 in four of five objective areas. Most successful aspect of these programs, according to teachers, was increasing student interest and enthusiasm for math. Least successful was reducing disparity in achievement levels between majority and minority students. Ratings at the individual schools were consistently high, with ratings below 5.0 coming in only three instances.

Several schools had part-time or "need-based" Chapter 636 programs in reading or math. Students were referred to a teacher or aide for specific problems in one or more subject areas. After a certain period of time for instruction or reinforcement, these students would be replaced by other students, or the same students might be referred for additional work in other problem areas.

At schools with such programs, classroom teachers were asked to complete student progress evaluation forms for a sample of students who participated in the Chapter 636 part-time "need-based" programs. Results of these evaluations are given in Table B44. As shown there, the academic progress of at least 80 percent of the students improved (some or much). Additionally, more than 80 percent of the students showed improvement in self-confidence. Improvement in attitude toward school was less pronounced, however, as only 57% showed improvement (though 36% had satisfactory attitude to begin with).

Compared to last year, the percentage of students showing improvement in academic areas was slightly lower, in attitude was equal, and in attitude toward school was lower (see Table B45). In each area, the percentage of students showing no change was the lowest ever. As perceived by classroom teachers, part-time "need-based" programs were successful this year, particularly at improving student academic progress and self-confidence.

A full day kindergarten program was initiated in 1983-84 at Brightwood School in order to attract non-Hispanic magnet students to the school. A target of 12 magnet students was set and met both years, comprising half of the class of 24, the other half being neighborhood students. The program placed heavy emphasis on readiness skills in preparation for first grade. In the opinion of the project teacher, students were able to progress at a much faster rate in a schedule that was considerably less rushed than in a half-day kindergarten program. To measure student progress in development of readiness skills the Boehm Test of Basic Concepts, a 50 item first-grade readiness test, was administered to all students in the full-day kindergarten at the beginning and end of the school year. Students did indeed show progress in readiness skills as mean raw score increased from 31.5 to 41.8, a statistically significant gain of 10.3 (see Table B46). This gain exceeded that of last year by 1.6 points. This program appears to have been quite successful in preparing students for grade one, as the average student in the class achieved mastery of 42 of the 50 concept areas.

A Saturday workshop program to prepare students to take the SAT was held for six weeks in February and March at Technical High School this year. Thirty-four students from Classical and Tech, the course limit, participated in the program with selection based on student interest, although priority was given to eleventh graders. At the first session students were given a pretest consisting of a 30-minute verbal and 30 minute math section. Scores enabled teachers and students to determine their own areas of need. Students completed workbook assignments, discussed common areas of concern, and received individual tutoring, At the final workshop session a posttest was administered, a 30 minute verbal and 30 minute math test.

Half of the participants in the SAT workshop were male, half female. Racial distribution was 16 white (47%), 16 non-white (47%); and 2 Hispanic (6%). In order to promote regular attendance, students, prior to participation, were required to sign a contract asking for a commitment of effort and regular attendance. Students also paid a $3 materials fee (if possible) to provide for refreshments at each session (an additional enticement). Attendance was good as ten students had perfect attendance, six missed only once, and average number of students per session was 27 students (75%), an improvement over last year.

Objectives of the SAT program were to familiarize students with the SAT exam, to give them experience taking simple SAT's, and to improve student study skills and test-taking skills. Both students and parents seemed to be very enthusiastic about the program, and most students showed improvement on both the verbal and math mock SAT. Indeed, 17 of 22 students (77 percent) had a higher post score on the mock verbal SAT while 19 of 21 (90 percent) had a higher post score on the math SAT. Average score on the verbal test increased from 48 to 58.3, a significant gain of 10.3 (df=21, t=4.14, $p < .01$) while average on the math SAT increased from 52.1 to 64.0, a significant gain of 11.9 (df=20, t=+ 4.63, $p < .01$).

Recommendations

1. Several schools have consistently demonstrated outstanding success in reading/language arts or mathematics programs. Any schools dissatisfied with results of their current basic skills programs or initiating new programs should be encouraged to consult with the principal or staff at schools which have had consistently successful programs in these areas rather than try to "reinvent the wheel."
2. While reading and math programs have been fairly successful at improving student achievement levels, they have been less successful at changing student attitudes. It is recommended that teachers in Chapter 636 reading and math programs make a more concerted effort at providing experiences that might better improve student attitudes toward reading or math (i.e. radio or TV broadcasts, dramatic presentations, puppet shows, choral readings.)
3. Chapter 636 math programs had less success this year in improving student achievement than ever before. While the change in test to the Metropolitan and in testing schedule (Spring-Spring testing using different levels of the Metropolitan) could be factors in the lower level of success, there may also be a need for some changes in mathematics programs or curriculum. Together, principals and teachers with Chapter 636 math programs should be encouraged to scrutinize their math programs to determine if these programs are adequately meeting the needs of their students.

TABLE B1

Achievement Test Results: Chapter 636 Small Group Basic Skills Programs

Reading/Language Arts

Sch	Gr.	Subtest	N	Test Level, Form Pre	Test Level, Form Pst	Scale/Raw Score Pre	Scale/Raw Score Pst	Scale/Raw Score Dif	Grade Equivalent Pre	Grade Equivalent Pst	Grade Equivalent Dif	Grade Equivalent (Exp)	Percentile Rank Pre	Percentile Rank Pst	Percentile Rank Dif	Normal Curve Equivalent Pre	Normal Curve Equivalent Pst	Normal Curve Equivalent Dif	Percent Improved ≥ Exp
Bea	1	Rdg	7	CAT-11C	CAT-11C	12.7	35.4	+22.7	0.1	1.6	+1.5*	(0.7)	4	46	+42	13.1	47.9	+34.8**	100%
	2	Rdg	11	CAT-12C	CAT-12C	41.7	60.5	+18.8	2.3	3.3	+1.0*	(0.7)	56	63	+ 7	53.2	57.0	+ 3.8	82%
Bow	1	Rdg	8	CAT-11C	CAT-11C	31.4	50.4	+19.0	1.5	2.2	+0.7*	(0.7)	82	80	- 2	69.3	67.7	- 1.6	88%
	3	Rdg	8	CAT-13C	CAT-13C	52.1	61.6	+ 9.5	3.3	4.0	+0.7*	(0.7)	55	57	+ 2	52.6	53.7	+ 1.1	63%
Bru	2	Rdg	10	CAT-12C	CAT-12C	35.7	58.6	+22.9	2.0	3.1	+1.1*	(0.7)	45	59	+14	47.4	54.8	+ 7.4**	90%
	4	Rdg	5	MATELJS	MATELJS	617	610	- 7	2.7	2.6	-0.1	(0.6)	24	14	-10	35.1	27.2	- 7.9	20%
Dor	4	Rdg	6	MATELJS	MATELJS	702	730	+ 28	5.1	6.5	+1.4*	(0.6)	68	68	+ 0	59.9	59.9	+ 0.0	67%
Fre	5	Rdg	9	MATELJS	MATINJS	673	705	+ 32	3.8	5.2	+1.4*	(1.0)	40	44	+ 4	44.7	46.8	+ 2.1	22%
	6	Rdg		MATINJS	MAT6														
Gli	5	Rdg	9	MATINJS	MATINJS	629	692	+ 63	2.8	4.5	+1.7*	(0.6)	16	36	+20	29.1	42.5	+13.4**	78%
	6	Rdg		MATINJS	MAT6														
Hom	3	Rdg	11	CAT-13C	CAT-13C	47.1	61.5	+14.4	2.8	3.9	+1.1*	(0.7)	45	57	+12	47.4	53.7	+ 6.3	91%
	4	Rdg	10	MATELJS	MATELJS	644	689	+ 45	3.1	4.4	+1.3*	(0.6)	36	48	+12	42.5	48.9	+ 6.4	60%
IOE	2	Rdg	16	CAT-12C	CAT-12C	19.0	59.9	+40.9	1.1	3.2	+2.1*	(0.7)	8	62	+54	20.4	56.4	+36.0**	100%
	4	Rdg	15	MATELJS	MATELJS	642	697	+ 55	3.1	4.8	+1.7*	(0.6)	34	52	+18	41.3	51.1		87%
	4	Lan	6	MATELJS	MATELJS	540	606	+ 66	3.1	4.3	+1.2*	(0.6)	34	40	+ 6	41.3	44.7	+ 3.4	83%
Kns	1	Rdg	11	CAT-11C	CAT-11C	31.0	39.2	+ 8.2	1.5	1.8	+0.3	(0.7)	81	56	-25	68.5	53.2	-15.3	27%
	4	Rdg	28	MATELJS	MATELJS	672	715	+ 43	3.8	5.7	+1.9*	(0.6)	50	60	+10	50.0	55.3	+ 5.3	75%

Page 2 TABLE B1 Achievement Test Results: Chapter 636 Small Group Basic Skills Programs - Reading/Language Arts

				Test Level, Form		Scale/Raw Score			Grade Equivalent				Percentile Rank			Normal Curve Equivalent			Percent Improved
Sch	Gr.	Subtest	N	Pre	Pst	Pre	Pst	Dif	Pre	Pst	Dif	(Exp)	Pre	Pst	Dif	Pre	Pst	Dif	≥ Exp
Lyn	3	Rdg	11	CAT-13C	CAT-13C	56.1	69.4	+13.3	3.5	5.6	+2.1*	(0.7)	63	88	+25	57.0	74.7	+17.7**	100%
Mem	1	Rdg	12	CAT-11C	CAT-11C	36.3	56.8	+20.5	1.7	2.8	+1.1*	(0.7)	91	93	+ 2	78.2	81.1	+ 2.9	100%
	2	Rdg	6	CAT-12C	CAT-12C	45.2	65.2	+20.0	2.4	3.7	+1.3*	(0.7)	61	79	+18	55.9	67.0	+11.1**	100%
Six	2	Rdg	18	CAT-12C	CAT-12C	25.1	50.9	+25.8	1.5	2.6	+1.1*	(0.7)	22	46	+24	33.7	47.9	+14.2**	89%
	3	Rdg	15	CAT-13C	CAT-13C	38.1	55.3	+17.2	2.6	3.7	+1.1*	(0.7)	31	42	+11	39.6	45.8	+ 6.2	93%
	4	Rdg	6	MATELJS	MATELJS	566	586	+20	2.1	2.3	+0.2	(0.6)	8	8	+ 0	20.4	20.4	+ 0	33%
Tal	2	Rdg	11	CAT-12C	CAT-12C	20.0	35.5	+15.5	1.2	2.0	+0.8*	(0.7)	10	25	+15	23.0	35.8	+12.8**	73%
War	5	Rdg	8	MATELJS	MATINJS	633	656	+23	2.9	3.3	+0.4	(1.0)	22	20	- 2	33.7	32.3	- 1.4	25%
Was	6	Rdg		MATINJS	MAT6														
JHS																			
Kil	7	Rdg	39	MATADJI	MATADJS	660	682	+22	3.4	4.1	+0.7*	(0.7)	16	16	+ 0	29.1	29.1	+ 0.0	51%
	8	Rdg	27	MATADKI	MATADJS	703	744	+41	5.1	7.2	+2.1*	(1.0)	24	34	+10	35.1	41.3	+ 6.2	74%
SHS																			
Cla	9	Rdg	7	GATE-E1	GATE-EI	52.4	62.4	+10.0	7.7	9.5	+1.8*	(0.8)	34	46	+12	41.3	47.9	+ 6.6	86%
	9	Rdg	7	GATE-E1	GATE-E2	53.4	58.6	-----	7.9	9.0	+1.1*	(0.4)	31	40	+ 9	39.6	44.7	+ 5.1	57%
	10	Rdg	7	GATE-F1	GATE-F1	28.7	40.3	+11.6	5.6	7.4	+1.8*	(0.8)	10	20	+10	23.0	32.3	+ 9.3**	100%
	10	Rdg	8	GATE-F1	GATE-F2	47.9	48.3	-----	9.0	9.6	+0.6*	(0.3)	35	37	+ 2	41.9	43.0	+ 1.1	63%
	11	Rdg	5	GATE-F1	GATE-F1	44.4	51.8	+ 7.4	8.3	9.8	+1.5*	(0.8)	24	32	+ 8	35.1	40.1	+ 5.0	80%
	11	Rdg	9	GATE-F1	GATE-F2	37.1	44.6	-----	7.0	8.8	+1.8*	(0.5)	13	24	+11	26.3	35.1	+ 8.8**	89%
	12	Rdg	4	GATE-F1	GATE-F1	34.3	40.0	+ 5.7	6.5	7.4	+0.9*	(0.8)	8	11	+ 3	20.4	24.2	+ 3.8	50%
	12	Rdg	9	GATE-F1	GATE-F2	58.0	61.1	-----	11.1	12.2	+01.1*	(0.4)	37	44	+ 7	43.0	46.8	+ 3.8	44%

Page 3 TABLE B1 Achievement Test Results: Chapter 636 Small Group Basic Skills Programs - Reading/Language Arts

				Test Level, Form		Scale/Raw Score			Grade Equivalent				Percentile Rank			Normal Curve Equivalent			Percent Improved
Sch	Gr.	Subtest	N	Pre	Pst	Pre	Pst	Dif	Pre	Pst	Dif	(Exp)	Pre	Pst	Dif	Pre	Pst	Dif	≥ Exp
SHS																			
Com	10	Voc	41	STAN-BA	STAN-BB	23.8	29.0	-----	7.6	8.8	+1.2*	(0.4)	---	---	---	----	----	-----	90%
	10	Cmp	41	STAN-BA	STAN-BB	21.5	29.5	-----	6.2	7.9	+1.7*	(0.4)	---	---	---	----	----	-----	95%
	11	Voc	4	STAN-BA	STAN-BB	16.8	23.3	-----	5.4	7.1	+1.7*	(0.4)	---	---	---	----	----	-----	100%
	11	Cmp	4	STAN-BA	STAN-BB	19.5	26.8	-----	5.6	7.3	+1.7*	(0.4)	---	---	---	----	----	-----	100%
Tec	9	Rdg	10	CAT-18C	CAT-18D	18.2	37.8	-----	4.6	8.3	+3.7*	(0.8)	5	36	+31	15.4	42.5	+27.1**	90%
	10	Rdg	30	CAT-18C	CAT-18D	22.8	34.2	-----	5.8	7.8	+2.0*	(0.8)	---	---	---	----	----	-----	87%
	11	Rdg	11	CAT-18C	CAT-18D	24.0	34.6	-----	6.1	7.9	+1.8*	(0.8)	---	---	---	----	----	-----	73%
	12	Rdg	7	CAT-18C	CAT-18D	17.1	29.1	-----	4.3	6.9	+2.6*	(0.8)	---	---	---	----	----	-----	86%
Tot	Ele		257	-------	-------	----	----	-----	---	---	+1.2*	(0.7)	41	54	+13	45.2	52.1	+ 6.9	76%
	JHS		66	-------	-------	----	----	-----	---	---	+1.3*	(0.8)	19	23	+ 4	31.5	34.4	+ 2.9	61%
	SHS		204	-------	-------	----	----	-----	---	---	+1.7*	(0.6)	22	34	+12	33.7	41.3	+ 7.6**	85%
Tot			527	-------	-------	----	----	-----	---	---	1.4*	(0.7)	34	45	+11	41.3	47.4	+ 6.1	78%

*Mean GE gain ≥ month/month

**Mean NCE gain ≥ 7.0

TABLE B2

Ratios of Obtained to Expected Grade Equivalent Gains

Chapter 636 Small Group Basic Skills Reading/Language Programs

Eight-Year Comparison

School Level	77-78	78-79	79-80	80-81	81-82	82-83	83-84	84-85
Elem	1.29	1.14	1.14	1.29	1.38	1.43	1.43	1.71
JHS	0.57	0.43	0.50	0.29	1.63	1.75	1.63	1.63
SHS	1.38	1.75	2.25	2.25	2.63	2.43	2.67	2.83
TOTAL	1.29	1.43	1.57	1.75	1.88	1.86	1.71	2.00

TABLE B3

NCE Change

Chapter 636 Small Group Basic Skills Reading/Language Programs

Eight-Year Comparison

School Level	77-78	78-79	79-80	80-81	81-82	82-83	83-84	84-85
Elem	+4.3	+5.3	+3.0	+3.8	+6.2	+5.4	+5.9	+6.9
JHS	----	----	-2.9	-3.3	+3.5	+2.9	+2.5	+2.9
SHS	+2.6	+4.4	+8.6*	+7.6*	+7.6*	+5.8	+5.4	+7.6*
TOTAL	+3.9	+5.2	+4.3	+5.0	+6.2	+4.8	+5.5	+6.1

*NCE Change ≥ 7.0

TABLE B4

Percent of Students Attaining Month-for-Month Gain
Chapter 636 Small Group Basic Skills Reading/Language Programs
Six-Year Comparison

School Level	79-80	80-81	81-82	82-83	83-84	84-85
Elem	59%	67%	71%	71%	72%	76%
JHS	39%	33%	59%	62%	60%	61%
SHS	74%	67%	78%	72%	83%	85%
TOTAL	60%	65%	72%	70%	74%	78%

TABLE B5

Achievement Test Results: Chapter 636 Small Group Enrichment Programs

Reading/Language Arts

School	Gr.	Subtest	N	Test Level, Form Pre	Test Level, Form Pst	Scale/Raw Score Pre	Scale/Raw Score Pst	Scale/Raw Score Dif	Grade Equivalent Pre	Grade Equivalent Pst	Grade Equivalent Dif	Grade Equivalent (Exp)	Percentile Rank Pre	Percentile Rank Pst	Percentile Rank Dif	Normal Curve Equivalent Pre	Normal Curve Equivalent Pst	Normal Curve Equivalent Dif	Percent Improved ≥ Exp
Arm	5	Rdg	17	MATELJS	MATINJS	759	780	+21	8.2	9.3	+1.1*	(1.0)	82	78	- 4	69.3	66.3	- 3.0	29%
	6	Rdg		MATINJI	MAT6														
Bal	1	Rdg	11	CAT-11C	CAT-11C	31.9	45.8	+13.9	1.5	2.1	+0.6	(0.7)	84	72	-12	70.9	62.3	- 8.6	55%
	2	Rdg	9	CAT-12C	CAT-12C	48.1	64.1	+16.0	2.5	3.6	+1.1*	(0.7)	65	74	+ 9	58.1	63.5	+ 5.4	78%
	3	Rdg	7	CAT-13C	CAT-13C	61.4	67.9	+ 6.5	3.9	5.0	+1.1*	(0.7)	81	86	+ 5	68.5	72.8	+ 4.3	57%
	4	Lan	15	MATELJS	MATELJS	690	745	+55	6.1	8.1	+2.0*	(0.6)	80	84	+ 4	67.7	70.9	+ 3.2	73%
Bow	4	Lan	17	MATELJS	MATELJS	672	742	+70	5.7	8.0	+2.3*	(0.6)	74	82	+ 8	63.5	69.3	+ 5.8	71%
Bro	5	Rdg	10	MATELJS	MATINJS	764	780	+16	8.4	9.3	+0.9	(1.0)	84	78	- 6	70.9	66.3	- 4.3	50%
	5	Lan	23	MATELJS	MATINJS	791	789	- 2	10.4	10.3	-0.1	(1.0)	94	86	- 8	82.7	72.8	- 9.9	30%
	6	Rdg		MATINJI	MAT6														
Gli	5	Rdg	9	MATELJS	MATINJS	753	770	+17	7.8	8.7	+0.9	(1.0)	86	76	-10	72.8	64.9	- 7.9	67%
	6	Rdg		MATINJI	MAT6														
How	1	Rdg	7	CAT-11C	CAT-11C	16.0	53.6	+37.6	0.4	2.5	+2.1*	(0.7)	14	85	+71	27.2	71.8	+44.6**	100%
	2	Rdg	4	CAT-12C	CAT-12C	48.5	61.0	+12.5	2.5	3.3	+0.8*	(0.7)	66	64	- 2	58.7	57.5	- 1.2	75%
	3	Rdg	3	CAT-13C	CAT-13C	58.7	57.0	- 1.7	3.7	3.6	-0.1	(0.7)	75	53	-22	64.2	51.6	-12.6	33%
	4	Rdg	8	MATELJS	MATELJS	705	757	+52	5.2	8.1	+2.9*	(0.6)	68	80	+12	59.9	67.7	+ 7.8**	88%

Page 2 TABLE B5 Achievement Test Results: Chapter 636 Small Group Enrichment Programs - Reading/Language Arts

				Test Level, Form		Scale/Raw Score			Grade Equivalent				Percentile Rank			Normal Curve Equivalent			Percent Improved
School	Gr.	Subtest	N	Pre	Pst	Pre	Pst	Dif	Pre	Pst	Dif	(Exp)	Pre	Pst	Dif	Pre	Pst	Dif	Exp
IOE	3	Rdg	6	CAT-13C	CAT-13C	58.3	66.0	+ 7.7	3.6	4.5	+0.9*	(0.7)	75	78	+ 3	64.2	66.3	+ 2.1	83%
Lyn	4	Lan	17	MATELJS	MATELJS	65.5	808	+153	5.3	12.5	+7.2*	(0.6)	70	96	+26	61.0	86.9	+25.9**	100%
New	5	Rdg	70	MATELJS	MATINJS	729	753	+ 24	6.5	7.8	+1.3*	(1.0)	68	68	+ 0	59.9	59.9	+ 0.0	49%
	6	Rdg		MATINJI	MATINJS														
Tal	4	Rdg	6	MATELJS	MATELJS	739	752	+ 13	6.9	7.8	+0.9*	(0.6)	82	78	- 4	69.3	66.3	- 3.0	67%
War	6	Rdg		MATINJS	MAT6														
Was	6	Rdg		MATINJI	MAT6														
Whi	2	Rdg	6	CAT-12C	CAT-12C	63.3	68.0	+ 4.7	3.5	4.4	+0.9*	(0.7)	91	91	+ 0	78.2	78.2	+ 0.0	83%
	3	Rdg	13	CAT-13C	CAT-13C	66.8	71.4	+ 4.6	4.8	6.6	+1.8*	(0.7)	93	98	+ 5	81.1	93.3	+12.2**	85%
	4	Rdg	9	MATELJS	MATELJS	752	786	+34	7.8	9.6	+1.8*	(0.6)	86	90	+ 4	72.8	77.0	+ 4.2	67%
Total			267	------	------	---	---	-----	---	----	+1.6*	(0.8)	76	79	+ 3	64.9	67.0	+ 2.1	61%

*Mean GE gain ≥ month/month

**Mean NCE gain ≥ 7.0

TABLE B6

Ratios of Obtained to Expected Grade Equivalent Gains
Chapter 636 Small Group Enrichment Reading/Language Arts Programs
Eight-Year Comparison

Year	Ratio
1977-78	1.43
1978-79	2.00
1979-80	1.71
1980-81	1.86
1981-82	2.00
1982-83	1.57
1983-84	2.43
1984-85	2.00

TABLE B7

NCE Changes

Chapter 636 Small Group Enrichment Reading/Language Arts Programs

Eight-Year Comparison

Year	Ratio
1977-78	+2.3
1978-79	+3.4
1979-80	+2.1
1980-81	+2.8
1981-82	+3.2
1982-83	+3.2
1983-84	+3.8
1984-85	+2.1

TABLE B8

Percent of Students Attaining Month-for-Month Gain
Chapter 636 Small Group Enrichment Reading/Language Arts Programs
Five-Year Comparison

Year	%
1980-81	59%
1981-82	69%
1982-83	61%
1983-84	68%
1984-85	61%

TABLE B9

Metropolitan Achievement Test Results

Chapter 636 Total School Reading/Language Arts Programs

School	Gr.	Subtest	N	Level, Form		Scale Score			Grade Equivalent				Percentile Rank			Normal Curve Equivalent			Percent Improved
				Pre	Pst	Pre	Pst	Dif	Pre	Pst	Dif	(Exp)	Pre	Pst	Dif	Pre	Pst	Dif	≥ Exp
Bri	4	Read	49	ELEJS	ELEJS	639	675	+36	3.0	3.9	+0.9*	(0.6)	34	40	+ 6	41.3	44.7	+3.4	47%
DeB	4	Lang	35	ELEJS	ELEJS	592	642	+50	4.0	5.0	+1.0*	(0.6)	50	52	+ 2	50.0	51.1	+1.1	60%
Lib	4	Lang	48	ELEJS	ELEJS	604	665	+61	4.2	5.5	+1.3*	(0.6)	54	60	+ 6	52.1	55.3	+3.2	69%
Lin	4	Read	56	ELEJS	ELEJS	660	709	+49	3.4	5.4	+1.9*	(0.6)	44	58	+14	46.8	54.2	+7.4**	73%
Sum	4	Read	76	ELEJS	ELEJS	676	715	+39	3.9	5.7	+1.8*	(0.6)	52	60	+ 8	51.1	55.3	+4.2	65%
Arm	5	Read	141	ELEJS	INTJS	695	719	+24	4.7	5.9	+1.2*	(1.0)	50	52	+ 2	50.0	51.1	+1.1	45%
Ell	5	Read	32	ELEJS	INTJS	697	709	+12	4.8	5.4	+0.6	(1.0)	52	46	- 6	51.1	47.9	-3.2	28%
Gli	5	Lang	74	ELEJS	INTJS	711	744	+33	6.8	8.1	+1.3*	(1.0)	74	74	+ 0	63.5	63.5	+0.0	53%
Arm	6	Read																	
Ell	6	Read																	
Gli	6	Lang																	
Total	4	----	264	ELEJS	ELEJS	---	---	---	---	---	+1.5*	(0.6)	47	55	+ 8	48.4	52.6	+4.2	63%
	5	----	247	ELEJS	INTJS	---	---	---	---	---	+1.2*	(1.0)	58	58	+ 0	54.2	54.2	+0.0	45%
	6																		
Total	4-6	----	511	----	----	---	---	---	---	---	+1.4*	(0.8)	52	56	+ 4	51.1	53.2	+2.1	55%

*Mean GE gain ≥ month/month

**Mean NCE gain ≥ 7.0

TABLE B10

Ratios of Obtained to Expected Grade Equivalent Gains

Chapter 636 Total School Reading/Language Arts Programs

Eight-Year Comparison

Year	Ratio
1977-78	0.86
1978-79	1.57
1979-80	1.14
1980-81	1.43
1981-82	1.38
1982-83	1.57
1983-84	1.71
1984-85	1.75

TABLE B11

Mean NCE Change

Chapter 636 Total School Reading/Language Arts Programs

Eight-Year Comparison

Year	Mean NCE Change
1977-78	+1.1
1978-79	+2.7
1979-80	+0.0
1980-81	+2.7
1981-82	+2.1
1982-83	+3.1
1983-84	+2.7
1984-85	+2.1

TABLE B12

Percent of Students Attaining Month-for-Month Gain
Chapter 636 Total School Reading/Language Arts Programs
Six-Year Comparison

Year	%
1979-80	56%
1980-81	66%
1981-82	54%
1982-83	62%
1983-84	64%
1984-85	55%

TABLE B13

Student Attitude Toward Reading by School

Sample of Chapter 636 Reading Programs

School	N	Mean Score Pre	Pst	Dif	T
Arm	17	80.6	75.4	-5.2	-3.32*
Ell	48	70.2	71.6	+1.4	+0.89
Fre	13	64.8	64.4	-0.4	-0.16
Gli	19	70.6	72.9	+2.3	+1.35
New	81	79.0	79.7	+0.7	+0.74
War	18	74.4	74.4	+0.0	+0.00
Was	14	70.8	80.4	+9.6	+5.01*
Total	210	74.6	75.6	+1.0	+1.58

*P $<$ .01

TABLE B15

Student Attitude Toward Reading by Year

Sample of Chapter 636 Reading Programs

Three-Year Comparison

Year	N	Mean Score Pre	Pst	Dif	T
1982-83	265	72.7	73.4	+0.7	+1.36
1983-84	211	74.5	73.7	-0.8	+1.06
1984-85	210	74.6	75.6	+1.0	+1.58

TABLE B14

Number and Percent of Students
Showing Improved Attitude Toward Reading by School
Sample of Chapter 636 Reading Programs

School	Total N	Improved N	Improved %
Arm	17	2	12%
Ell	48	25	52%
Fre	13	6	46%
Gli	19	12	63%
New	81	41	51%
War	18	7	39%
Was	14	13	93%
Total	210	106	50%

TABLE B16

Number and Percent of Students
Showing Improved Attitude Toward Reading by Year
Sample of Chapter 636 Reading Programs
Three-Year Comparison

Year	Total N	Improved N	Improved %
1982-83	265	137	52%
1983-84	211	97	46%
1984-85	210	106	50%

TABLE B17

Student Attitude Survey Results

Classical High School Chapter 636 Reading Lab Program

Two-Year Comparison

		Percent	Yes
	N=	38	36
Question		1983-84	1984-85
1. Have you become more aware of the uniqueness of individuals (that each student has different learning needs to master)?		100%	94%
2. Are you more aware that everyone needs to work diligently to overcome weaknesses?		95%	92%
3. Have you gained greater respect for students who are different from you in looks, ability, and learning styles?		87%	92%
4. Do you think students learn best when given different materials and are provided with different teaching approaches?		92%	94%
5. Have various teaching approaches and materials helped you?		92%	94%
6. Do you feel more responsible for your learning and successes?		95%	92%
7. Since taking this course, are you more confident with reading and studying tasks?		100%	97%
8. Have your grades improved?		86%	94%

TABLE B18

Writing Sample Results

Classical High School Writing/Study Skills Program

Five-Year Comparison

		Holistic Score			
Year	N	Pre	Pst	Dif	T
1980-81	31	2.26	2.86	+0.60	+3.72*
1981-82	25	2.28	2.60	+0.32	+2.56*
1982-83	21	2.12	2.48	+0.36	+3.42*
1983-84	34	2.35	2.82	+0.47	+2.77*
1984-85	26	2.27	2.89	+0.62	+2.88*

*P $<$ .01

TABLE B19

Number and Percent of Students

with Improved Writing Skills

Classical High School Writing/Study Skills Program

Five-Year Comparison

Year	Total N	Improved N	Improved %
1980-81	31	20	65%
1981-82	25	13	52%
1982-83	21	12	57%
1983-84	34	14	41%
1984-85	26	16	62%

TABLE B20

Student Perceptions

Classical High School Writing/Study Skills Program

Statement	Percent "Strongly Agree" or "Agree" (N=27)
1. I have learned many new techniques for studying as a result of this program.	85%
2. I have improved in my writing skills as a result of this program.	78%
3. I have found the study skills which I learned in this program to be useful in studying for some of my courses.	78%
4. I have found the writing skills learned in this program to be useful when doing written assignments for some of my courses.	78%
5. Because of what I have learned in this program, I am getting better grades in some of my courses in school.	70%
6. I would recommend this program to a friend who is having difficulty in school.	89%

TABLE B21

Student Overall Rating of the Classical

Chapter 636 Writing/Study Skills Program

Four-Year Comparison

Five Point Scale: 1 (Very Poor) -- 5 (Very Good)

Year	Rating
1980-81	3.95
1981-82	4.38
1982-83	3.95
1984-85	4.11

TABLE B22

Classroom Teacher Perceptions of Chapter 636 Reading Skills Improvement Programs

Success Rating of Objectives

Seven-Poont Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

	Mean Success Rating																								
N=*	4	6	9	4	4	5	7	9	6	11	11	18	5	6	9	13	10	12	7	4	19	15	16	11	221
	Bal	Bea	Bow	Bri	Bru	Dor	Fre	Gli	Hom	10E	Kns	Lin	Lyn	Mem	Six	Sum	Tal	War	Was	Ken	Kil	Cla	Com	Tec	Total
1. Improving student achievement levels in reading	5.50	6.67	6.67	5.50	6.25	6.40	6.43	6.44	6.83	6.55	6.10	6.44	6.60	6.83	6.67	5.85	6.10	6.00	6.29	6.50	6.11	5.33	4.06	6.00	6.06
2. Increasing student interest and enthusiasm for reading	5.50	6.50	6.44	4.75	6.00	6.75	6.29	6.11	6.17	6.55	5.91	6.56	6.60	6.83	6.33	5.38	6.30	5.67	6.00	6.75	5.67	4.77	3.75	5.82	5.85
3. Enhancing student self-esteem as a result of more successful experiences in reading	6.25	6.33	6.67	4.75	6.25	6.40	6.43	6.22	6.33	6.64	6.09	6.56	6.60	6.83	6.44	5.85	6.20	5.50	6.14	6.75	5.61	5.29	3.94	5.91	5.96
4. Providing students with more "time on task" in reading	4.67	6.83	6.67	5.50	6.25	6.40	6.43	6.44	6.83	6.55	6.00	6.56	6.60	6.83	6.67	5.85	6.40	5.75	6.43	6.50	5.89	5.29	3.94	6.27	6.05
5. Reducing the disparity in reading achievement between majority and minority students at this school	4.75	6.17	6.33	5.25	6.00	6.75	6.00	6.11	6.67	6.36	5.80	6.18	6.60	6.83	6.67	5.15	5.60	5.55	6.14	6.75	5.58	5.07	3.69	5.33	5.73

*Not all teachers responded to each item

TABLE B23

Classroom Teacher Perceptions of Chapter 636 Reading Enrichment Programs

Success Rating of Objectives

Seven-Point Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

	Mean Success Rating									
N=*	17	5	9	5	7	10	18	12	11	94
	Arm	Bri	Bro	Dor	Ell	Gli	How	New	Whi	Total
1. Improving student achievement levels in reading	6.00	5.40	5.11	6.75	5.14	6.30	6.39	5.67	6.73	6.00
2. Increasing student interest and enthusiasm for reading	6.00	5.60	5.22	6.40	5.57	6.40	6.33	5.92	6.82	6.09
3. Enhancing student self-esteem by providing more challenging experiences in reading	6.18	5.40	5.33	6.40	5.14	6.40	6.56	5.92	6.73	6.12
4. Reducing the disparity in reading achievement between majority and minority students at this school	5.71	5.20	4.89	5.60	5.00	6.00	6.41	4.58	6.55	5.66
5. Providing more enrichment experiences for students than classroom teachers could provide	6.47	5.00	5.50	6.60	6.00	6.50	6.89	6.17	6.82	6.37
6. Increasing the amount of independent outside reading done by students	6.06	5.00	5.00	6.75	4.86	6.30	6.29	6.33	6.36	5.98
7. Increasing student exposure to literature of other cultures	5.76	5.40	5.00	6.25	6.00	6.30	6.24	5.92	6.91	6.03

*Not all teachers responded to each item

TABLE B24

Classroom Teacher Perceptions of Chapter 636 Language Skills Improvement Programs

Success Rating of Objectives

Seven-Point Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

		Mean Success Rating					
	N=*	10	10	5	18	23	66
Objective		Gli	IOE	Lil	Cla	Put	Total
1. Improving student skills in language arts		6.40	6.30	6.10	5.11	5.09	5.58
2. Increasing student interest and enthusiasm for language arts		6.20	6.30	6.20	4.94	4.87	5.42
3. Enhancing student self-esteem as a result of more successful experiences in language arts		6.30	6.50	5.80	5.44	5.52	5.80
4. Providing students with more "time on task" in language arts		6.30	6.50	6.20	5.06	5.57	5.74
5. Reducing the disparity in language arts achievement between majority and minority students at this school		6.20	6.30	5.80	4.82	5.05	5.42

*Not all teachers responded to each item

TABLE B25

Classroom Teacher Perceptions of Chapter 636 Language Arts Enrichment Programs

Success Rating of Objectives

Seven-Point Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

	Mean Success Rating											
N=*	17	7	11	9	14	9	11	17	14	7	8	122
Objective	Arm	Bal	Bow	Bro	DeB	Gle	Gli	How	Kns	Lyn	Tal	Total
1. Improving student skills in language arts beyond the basal language arts program	6.06	6.29	6.18	5.44	6.57	6.11	6.36	6.47	5.15	6.57	6.50	6.14
2. Increasing student interest and enthusiasm in language arts	5.88	6.57	6.36	5.67	6.57	6.11	6.27	6.53	5.31	6.71	6.67	6.20
3. Enhancing student self-esteem by providing a greater challenge in language arts	6.00	6.57	6.45	5.67	6.54	6.00	6.27	6.59	5.29	6.57	6.50	6.19
4. Reducing the disparity in language arts skills between majority and minority students at this school	6.00	5.50	6.27	5.75	6.36	5.89	6.00	6.63	5.15	6.57	5.83	6.03
5. Providing more language arts enrichment opportunities than classroom teachers could provide	6.24	6.71	6.36	6.22	6.14	6.22	6.27	6.88	5.07	6.83	6.50	6.26
6. Increasing student exposure to the contributions of other cultures to language	5.65	5.71	6.10	5.00	6.21	5.50	5.45	6.47	3.69	6.83	5.80	5.61

*Not all teachers responded to each item

TABLE B26

Achievement Test Results: Chapter 636 Small Group Basic Skills Programs

Mathematics

School	Gr.	N	Test Level, Form		Scale/Raw Score			Grade Equivalent				Percentile Rank			Normal Curve Equivalent			Percent Improved
			Pre	Pst	Pre	Pst	Dif	Pre	Pst	Dif	(Exp)	Pre	Pst	Dif	Pre	Pst	Dif	≥ Exp
Arm	5	29	MATELJS	MATINJS	591	613	+22	4.3	4.7	+0.4	(1.0)	36	26	-10	42.5	36.5	-6.0	35%
	6		MATINJI	MAT 6														
Bow	3	10	MATP2JI	MATELJS	433	468	+35	2.1	2.4	+0.3	(0.6)	10	14	+ 4	23.0	27.2	+4.2	60%
Bro	5	10	MATELJS	MATINJS	575	617	+42	4.0	4.8	+0.8	(1.0)	30	28	- 2	39.0	37.7	-1.3	60%
Hom	3	9	MATP2JI	MATELJS	474	525	+51	2.5	3.1	+0.6*	(0.6)	22	32	+10	33.7	40.1	+6.4	56%
	4	8	MATP2JI	MATELJS	574	590	+16	3.9	4.3	+0.4	(1.0)	54	36	-18	52.1	42.5	-9.6	25%
IOE	3	9	MATP2JI	MATELJS	525	574	+49	3.1	4.0	+0.9*	(0.6)	48	54	+ 6	48.9	52.1	+3.2	56%
	4	14	MATP2JI	MATELJS	567	586	+19	3.8	4.2	+0.4	(1.0)	50	34	-16	50.0	41.3	-8.7	36%
Lib	2	7	CAT-12C	CAT-12C	21.1	33.9	+12.8	1.4	2.1	+0.7*	(0.7)	12	20	+ 8	25.3	32.3	+7.0**	43%
	4	12	MATP2JI	MATELJS	542	577	+35	3.4	4.0	+0.6	(1.0)	40	30	-10	44.7	39.0	-5.7	50%
Six	2	19	CAT-12C	CAT-12C	31.7	46.4	+14.7	1.9	2.7	+0.8*	(0.7)	39	48	+ 9	44.1	48.9	+4.8	79%
	4	16	MATP2JI	MATELJS	613	633	+20	4.7	5.1	+0.4	(1.0)	70	56	-14	61.0	53.2	-7.8	31%
Tal	4	9	MATP2JI	MATELJS	558	580	+22	3.6	4.1	+0.5	(1.0)	46	32	-14	47.9	40.1	-7.8	0%
War	5	35	MATELJS	MATINJS	577	637	+60	4.0	5.2	+1.2*	(1.0)	30	38	+ 8	39.0	43.6	+4.6	63%
	6		MATINJI	MAT6														
Was	6		MATINJI	MAT6														
Total		187	------	------	---	---	---	---	---	+0.7	(0.9)	38	35	- 3	43.6	41.9	-1.7	48%

*Mean GE gain ≥ month/month

**Mean NCE gain ≥ 7.0

TABLE B27

Ratios of Obtained to Expected Grade Equivalent Gain
Chapter 636 Small Group Basic Skills Math Programs
Eight-Year Comparison

Year	Ratio
1977-78	1.29
1978-79	1.00
1979-80	1.14
1980-81	1.14
1981-82	1.38
1982-83	1.43
1983-84	1.29
1984-85	0.78

TABLE B28

NCE Changes

Chapter 636 Small Group Basic Skills Math Programs

Eight-Year Comparison

Year	NCE Change
1977-78	+3.6
1978-79	+4.6
1979-80	+4.9
1980-81	+6.7
1981-82	+7.5*
1982-83	+6.7
1983-84	+6.8
1984-85	-1.7

*NCE Change $\geq$ 7.0

TABLE B29

Percent of Students Attaining Month-for-Month Gain
Chapter 636 Small Group Basic Skills Math Programs
Six-Year Comparison

Year	%
1979-80	63%
1980-81	64%
1981-82	68%
1982-83	72%
1983-84	69%
1984-85	48%

TABLE B30

Achievement Test Results: Chapter 636 Small Group Enrichment Programs

Mathematics

School	Gr.	N	Test Level, Form Pre	Test Level, Form Pst	Raw Score Pre	Raw Score Pst	Raw Score Dif	Grade Equivalent Pre	Grade Equivalent Pst	Grade Equivalent Dif	Grade Equivalent (Exp)	Percentile Rank Pre	Percentile Rank Pst	Percentile Rank Dif	Normal Curve Equivalent Pre	Normal Curve Equivalent Pst	Normal Curve Equivalent Dif	Percent Improved ≥ Exp
Arm	5	14	MATELJS	MATINJS	790	810	+20	10.9	12.7	+1.8*	(1.0)	98	96	- 2	93.3	86.9	- 6.4	50%
Bro	5	15	MATELJS	MATINJS	752	792	+40	8.6	11.0	+2.4*	(1.0)	96	94	- 2	86.9	82.7	- 4.2	60%
Bru	4	9	MATP2JI	MATELJS	643	727	+84	5.4	7.6	+2.2*	(1.0)	82	92	+10	69.3	79.6	+10.3**	67%
Mem	3	16	MATP2JI	MATELJS	643	672	+29	5.4	6.0	+0.6*	(0.6)	94	89	- 5	82.7	75.8	- 6.9	56%
Six	3	23	MATP2JI	MATELJS	594	680	+86	4.3	6.2	+1.9*	(0.6)	80	92	+12	67.7	79.6	+11.9**	91%
War	5	11	MATELJS	MATINJS	688	729	+41	6.4	7.7	+1.3*	(1.0)	80	77	- 3	67.7	65.6	- 2.1	46%
	6		MATINJI	MAT6														
Che	7	51	MATINJS	MATAVJS	803	823	+20	12.0	13.0	+1.0*	(1.0)	80	86	+ 6	67.7	72.8	+ 5.1	33%
Total	-	139	-------	-------	---	---	---	----	----	+1.4*	(0.9)	85	89	+ 4	71.8	75.8	+ 4.0	53%

*Mean GE gain ≥ month/month

**Mean NCE gain ≥ 7.0

TABLE B31

Ratio of Obtained to Expected Grade Equivalent Gain
Chapter 636 Small Group Enrichment Math Programs
Eight-Year Comparison

Year	Ratio
1977-78	1.14
1978-79	1.86
1979-80	1.14
1980-81	1.71
1981-82	1.75
1982-83	2.57
1983-84	1.29
1984-85	1.56

TABLE B32

NCE Changes

Chapter 636 Small Group Enrichment Math Programs

Eight-Year Comparison

Year	NCE Change
1977-78	+2.5
1978-79	+3.1
1979-80	+3.9
1980-81	+8.8*
1981-82	+6.9
1982-83	+9.0*
1983-84	+3.5
1984-85	+4.0

*NCE Change $\geq$ 7.0

TABLE B33

Percent of Students Attaining Month-for-Month Gain
Chapter 636 Small Group Enrichment Math Programs
Five-Year Comparison

Year	%
1980-81	80%
1981-82	80%
1982-83	75%
1983-84	61%
1984-85	53%

TABLE B34

Metropolitan Mathematics Achievement Test Results

Chapter 636 Total School Mathematics Programs

School	Gr.	N	Level, Form Pre	Level, Form Pst	Scale Score Pre	Scale Score Pst	Scale Score Dif	Grade Equivalent Pre	Grade Equivalent Pst	Grade Equivalent Dif	Grade Equivalent (Exp)	Percentile Rank Pre	Percentile Rank Pst	Percentile Rank Dif	Normal Curve Equivalent Pre	Normal Curve Equivalent Pst	Normal Curve Equivalent Dif	Percent Improved ≥ Exp
Lib	4	42	PR2JI	ELEJS	606	621	+15	4.6	4.9	+0.3	(1.0)	68	50	-18	59.9	50.0	-9.9	31%
Lin	4	49	PR2JI	ELEJS	569	642	+73	3.8	5.3	+1.5*	(1.0)	52	60	+ 8	51.1	55.3	+4.2	69%
Sum	4	68	PR2JI	ELEJS	604	670	+66	4.5	6.0	+1.5*	(1.0)	68	72	+ 4	59.9	62.3	+2.4	59%
Arm	5	139	ELEJS	INTJS	640	673	+33	5.3	6.1	+0.8	(1.0)	60	54	- 6	55.3	52.1	-3.2	44%
Bro	5	133	ELEJS	INTJS	637	677	+40	5.2	6.2	+1.0*	(1.0)	58	56	- 2	54.2	53.2	-1.0	46%
Arm	6																	
Bro	6																	
Total	4	159	PR2JI	ELEJS	594	648	+54	4.3	5.5	+1.2*	(1.0)	64	64	+ 0	57.5	57.5	+0.0	55%
	5	272	ELEJS	INTJS	639	675	+36	5.3	6.1	+0.9	(1.0)	60	56	- 4	55.3	53.2	2.1	45%
	6																	
Total	4-6	431	----	----	---	---	---	---	---	+1.0	(1.0)	61	59	- 2	55.9	54.8	-1.1	48%

*GE gain ≥ month/month

TABLE B35

Ratios of Obtained to Expected Grade Equivalent Gains

Chapter 636 Total School Math Programs

Eight-Year Comparison

Year	Ratio
1977-78	1.00
1978-79	1.29
1979-80	1.00
1980-81	1.29
1981-82	1.13
1982-83	1.43
1983-84	1.43
1984-85	0.90

TABLE B36

Mean NCE Change

Chapter 636 Total School Math Programs

Eight-Year Comparison

Year	Mean NCE Change
1977-78	+2.7
1978-79	+3.1
1979-80	+2.1
1980-81	+3.2
1981-82	+2.1
1982-83	+3.7
1983-84	+3.2
1984-85	-1.1

TABLE B37

Percent of Students Attaining Month-for-Month Gain
Chapter 636 Total School Math Programs
Six-Year Comparison

Year	%
1979-80	64%
1980-81	63%
1981-82	62%
1982-83	71%
1983-84	65%
1984-85	48%

TABLE B38

Student Attitude Toward Math by School

Sample of Chapter 636 Math Programs

School	Mean Score N	Pre	Pst	Dif	T
Arm	50	65.2	66.3	+1.1	+0.60
War	25	69.0	65.0	-4.0	-2.52
Total	75	66.5	65.8	-0.7	-0.50

TABLE B39

Number and Percent of Students

Showing Improved Attitude Toward Math

Sample of Chapter 636 Math Programs

School	Total N	Improved N	Improved %
Arm	50	23	46%
War	25	7	28%
Total	75	30	40%

TABLE B40

Number and Percent of Students
Sharing Improved Attitude Toward Math by Year
Sample of Chapter 636 Math Programs
Three-Year Comparison

Year	Total N	Improved N	Improved %
1982-83	125	57	46%
1983-84	97	48	49%
1984-85	75	30	40%

TABLE B41

Student Perceptions of the Math/Computer Lab Programs

Statement	Percent "Strongly Agree" or "Agree" 97 Che	 98 New	 195 Total
1. I enjoyed participating in the Math Lab Program this year.	99%	100%	99%
2. I learned a lot about the use of computers in the math lab.	97%	100%	98%
3. I enjoyed math more this year because of the math lab.	76%	95%	86%
4. I wish that we could visit the math lab more often.	97%	100%	98%
5. I would like to work with computers when I get older.	86%	95%	90%
6. I like to tell my friends about the things we do in the math lab.	83%	90%	87%
7. In the math lab, I enjoyed writing computer programs to solve problems.	90%	97%	93%

TABLE B42

Classroom Teacher Perceptions of Chapter 636 Math Skills Improvement Programs

Success Rating of Objectives

Seven-Point Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

	Mean Success Rating															
N=*	17	9	5	1	5	7	5	15	5	8	13	6	14	7	3	120
Objective	Arm	Bow	Bro	Bru	Hom	IOE	Lib	Lin	Mem	Six	Sum	Tal	War	Was	Ken	Total
1. Improving student achievement levels in mathematics	6.29	6.44	5.40	4.00	6.80	6.14	6.60	6.53	6.80	6.75	4.77	6.83	6.29	5.57	7.00	6.19
2. Increasing student interest and enthusiasm for math	6.24	6.44	5.60	7.00	6.40	6.29	6.20	6.60	6.80	6.75	4.85	6.50	5.93	5.57	6.67	6.14
3. Enhancing student self-esteem as a result of more successful experiences in math	6.18	6.44	5.20	7.00	6.60	6.29	6.00	6.67	6.80	6.75	5.00	6.50	5.86	5.86	6.67	6.15
4. Providing students with more "time on task" in math	6.29	6.44	6.00	7.00	6.80	6.29	6.60	6.53	6.80	6.75	4.85	6.67	6.21	6.00	6.67	6.26
5. Reducing the disparity in math achievement between majority and minority students at this school	6.24	6.22	6.25	7.00	6.60	6.29	5.60	6.21	6.80	6.75	4.62	6.33	5.92	5.50	7.00	6.01

*Not all teachers responded to each item

TABLE B43

Classroom Teacher Perceptions of Chapter 636 Math Enrichment Programs

Success Rating of Objectives

Seven-Point Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

	Mean Success Rating									
N=*	16	7	1	14	6	13	5	13	6	81
Objective	Arm	Bro	Bru	New	Tal	War	Was	Che	For	Total
1. Improving student achievement levels in mathematics	6.38	5.43	4.00	5.50	6.67	6.38	6.20	5.15	6.00	5.90
2. Increasing student interest and enthusiasm for math	6.31	5.57	7.00	6.00	6.67	6.38	6.20	5.00	6.33	6.02
3. Enhancing student self-esteem by providing more challenging experiences in math	6.31	5.71	7.00	5.86	6.83	6.31	6.00	5.00	5.67	5.95
4. Reducing the disparity in math achievement between majority and minority students at this school	5.94	5.57	7.00	5.36	5.83	6.00	5.20	4.31	4.60	5.43
5. Providing more math enrichment experiences for students than classroom teachers could provide	6.38	5.71	7.00	5.71	6.50	6.38	5.80	5.00	6.40	5.96

*Not all teachers responded to each item

TABLE B44

Classroom Teacher Evaluation of Effectiveness of Part-Time Student "Need" Programs in Percentage

	Academic Progress					Percent of Students Whose Self-Confidence					Attitude Toward School				
School	Was Fine To Begin With	Improved Some	Improved Much	Showed No Change	Became Worse	Was Fine To Begin With	Improved Some	Improved Much	Showed No Change	Became Worse	Was Fine To Begin With	Improved Some	Improved Much	Showed No Change	Became Worse
Bal	33%	22%	33%	11%	0%	13%	25%	63%	0%	0%	56%	11%	22%	11%	0%
Bro	9%	27%	64%	0%	0%	0%	17%	83%	0%	0%	50%	25%	25%	0%	0%
Bru	33%	67%	0%	0%	0%	11%	89%	0%	0%	0%	33%	67%	0%	0%	0%
Gle	0%	67%	33%	0%	0%	11%	33%	56%	0%	0%	11%	33%	44%	11%	0%
IOE	4%	46%	46%	4%	0%	13%	38%	42%	8%	0%	42%	25%	25%	8%	0%
Kns	0%	27%	73%	0%	0%	0%	64%	36%	0%	0%	18%	18%	55%	9%	0%
Lib	0%	56%	44%	0%	0%	22%	22%	56%	0%	0%	78%	11%	11%	0%	0%
Tal	8%	42%	50%	0%	0%	0%	25%	75%	0%	0%	0%	50%	50%	0%	0%
Was	11%	44%	44%	0%	0%	18%	36%	45%	0%	0%	36%	18%	27%	18%	0%
Total	10%	44%	45%	2%	0%	10%	38%	50%	2%	0%	36%	28%	29%	7%	0%

TABLE B45

Teacher Evaluation of Effectiveness of Part-Time Student "Need" Programs

Five-Year Comparison

Category	Percent of Students				
	1980-81	1981-82	1982-83	1983-84	1984-85
1. Academic Progress					
Fine to begin with	2%	2%	2%	4%	10%
Improved (Some or Much)	94%	94%	93%	92%	89%
No Change	4%	4%	5%	5%	2%
Worse	0%	1%	0%	0%	0%
2. Self-Confidence					
Fine to begin with	13%	2%	2%	5%	10%
Improved (Some or Much)	74%	89%	89%	88%	88%
No Change	13%	8%	9%	8%	2%
Worse	0%	1%	0%	0%	0%
3. Attitude Toward School					
Fine to begin with	25%	11%	23%	18%	36%
Improved (Some or Much)	63%	72%	62%	65%	57%
No Change	10%	15%	14%	16%	7%
Worse	1%	2%	1%	1%	0%

TABLE B46

Boehm Test Results

Brightwood Full-Day Kindergarten Program

Two-Year Comparison

		Mean Score			
Year	N	Pre	Pst	Dif	T
1983-84	23	30.8	39.5	+08.7	+8.78*
1984-85	23	31.5	41.8	+10.3	+9.20*

$*P < .01$

C. Program Evaluation: Career Awareness Programs

Chapter 636 programs at five schools focused, to some extent, on the area of career awareness. Objective of these programs was that students would become more knowledgeable about the wide range of career options available to them.

At Liberty School, extensive use was made of Educational Television programs dealing with careers. A Chapter 636 aide has videotaped and catalogued almost 100 shows for later viewing by students. Students visited the media center with their classroom teachers on a regular basis to view and discuss the videotapes (or films). All necessary materials were previously gathered or prepared by the aide. Some activities were also conducted in the classrooms.

At Washington School a "special projects resource aide" spent a portion of her time in the area of career awareness. Activities included creating bulletin board displays with students, arranging for guest speakers in the area of career awareness, distributing career media materials to teachers, and assisting students in the preparation and printing of newspapers. The aide also helped to plan career related field trips, assisted teachers from other elementary schools in printing their school newspapers, and worked with students on special research projects.

At Chestnut, Kiley, and Van Sickle, resource teachers (full-time at Chestnut, part-time at Kiley and Van Sickle) implemented a career awareness program. In this program a wide range of activities helped to expose students to as many different career options as possible. These activities included lectures on how to take a job interview and how to fill out employment applications, showing filmstrips and movies on various career options, bringing in numerous guest speakers of both white and minority backgrounds representing both traditional and non-traditional roles, field trips to a number of locations ranging from business and government to manufacturing and higher education, visiting high schools (including full-day and half-day visitations) and viewing the movie "Color Your World: Choosing the Proper High School", in order to facilitate more accurate selection of high schools, using the Guidance Information System, and surveying student career interests using an occupational interest inventory spanning the 15 occupational clusters.

Speakers from and/or field trips to the following were included in the career awareness program this year.

Albert E. Steiger, Inc.
Barnes Municipal Airport
Bassett Printing Company
Baystate Gas Company
Career Development Institute
Channel 22 Meteorological Department
Classical High School
Commerce High School
Compugraphic Corporation
Digital Equipment Corporation
Hamilton Standard
Kidder Stacy Company
Marriott Hotel
McDonald's Corporation
Milton Bradley
Mercy Hospital
N.A.S.A.
New England Telephone Company
Northeast Utilities
Northfield Mountain Pump Storage Facility
Pratt and Whitney
Putnam High School
Shriner's Hospital
Springfield Fire Department
Springfield Newspapers
Springfield Police Department
Springfield Post Office
Springfield Technical Community College
State Line Potato Chip Company
Technical High School
United States Air Force
United States Army
United States Marine Corps
United States Navy
United Technology Diesel Systems
University of Massachusetts
  Bilingual Collegiate Program

In order to measure student acquisition of knowledge of careers resulting from this program, an Occupational Questionnaire was administered to a sample of students at all three schools on a pre-post basis. The Occupational Questionnaire is a shortened version of the Career and Occupational Development Survey prepared by the Massachusetts Department of Education, Bureau of Research and Assessment.

Results of the testing, as seen in Table C1, show that, totally and at each school, students had a significantly higher post score than pre, indicative of greater knowledge of careers. Compared to the previous two years the mean raw score gain was comparable but slightly less (see Table C2).

The proportion of all students with improved scores on the occupational questionnaire (indicative of increased awareness of career possibility was 75 percent, slightly less than the 80 percent target figure (see Table C3). Percent improved at Chestnut was almost unanimous, though only about two-thirds of the students at Kiley and Van Sickle showed improvement. Compared to last year, the rate of improvement this year was lower, though still not far from the 80% objective (see Table 4). As determined by this objective measure, the career awareness program in the three junior high schools was fairly successful in helping students reach a better understanding about the variety of careers available to them.

The program may have also been successful at stressing for students the importance of education today in attaining a successful career in the future. For a seventh grade English assignment at one of the junior high schools, students, after spending several sessions with the career awareness resource teacher, wrote a composition entitled "Why Are We In School". On almost every composition students mentioned the importance of what they were learning in school today for pursuing possible careers in the future. Excerpts from the student compositions included the following:

> "I go to school because I want a good job. Without education you won't get a good job."
>
> "The reason you are in school is to learn and to make something of yourself when you get older."
>
> "The purpose of going to school is to learn. When we learn more things we get better jobs in the future...We also learn some skills that are needed for certain jobs."

> "We need to learn because when we are older we can get a satisfying career...and we can be successful in the future years."

> "The purpose of being here is to get an education. Even if you don't go to college you can still get a pretty decent job...At this early age you have to start planning ahead on how you're going to live your life and support your family."

This year, for the first time, a sample of junior high school students were asked for their perceptions as to the value of the Chapter 636 career awareness program. Their perceptions, as presented in Table C5, were very positive. Almost every student felt that they had enjoyed participating in the career awareness program and that the program helped them to see how their school work related to the world of work. Ninety percent or more of the students indicated that the program helped them to discover more about some of their own interests in life and would enable them to make better decisions about a future career, while more than 80% felt that the program interested them in new career areas or helped them to learn better work habits. The only area where less than 80% of the students felt they had benefited was in learning better work habits at Kiley. Perhaps more should be done in this area at Kiley in another year.

The most valuable part of the career awareness program, according to students, were the field trips to local businesses and the high school visitations. Nothing was found to be particularly invaluable, though some of the guest speakers were not particularly effective, according to students.

As perceived by classroom teachers in the five career awareness program schools, the career programs were fairly successful. Teachers were asked to rate how successfully they felt each of the five objectives were accomplished this year. Most successful objective was increasing utilization of outside resources to provide students with first-hald information about careers followed by increasing student knowledge of career possibilities, both with success ratings of better than 5 on a 7-point scale (see Table C6). Least successful objective, particularly at the junior high schools, was providing teachers with new ideas for infusing career awareness into their teaching which managed a success rating of only 4.03. Thus, a stronger effort at providing assistance to classroom teachers in their efforts to infuse career awareness, particularly at the junior high school level, must be made (as recommended last year, as well). The junior high school programs, as presently implemented, focus primarily on students, but one person can cover only a minimum of material, especially considering the size of our junior high schools. By working more closely with classroom teachers, the scope of the program could be broadened and all teachers could be involved at increasing student awareness of possible career areas in the various subject areas. Some progress was made on this objective this year as more classroom teachers participated in career field trips related to their subject areas, but more needs to be done to assist classroom teachers in emphasizing the importance of what is being learned today to the world of work in the future. The career awareness resource teachers are apparently being underutilized in their capacity as resources to classroom teachers. A more concerted effort needs to be made in this area.

Many classroom teacher comments concerning the career awareness programs were positive. However, some concerns were also generated. Sample comments included the following:

> "Mr. ______ does an outstanding job as director of this program. The program, under his direction, is an asset to the school."
>
> "Excellent program - Mr. ______ does a fantastic job."
>
> "Students at this school need to know what careers and opportunities are available to them other than the traditional jobs.
>
> I feel this program is opening up a new world to them."
>
> "Mr. ______ is a skillful, resourceful, energetic, and successful teacher. His efforts are a credit to the 636 program."
>
> "Mr. ______ had done a great job with the students and has captured their interest. They have learned quite a bit from him."

"Lacks any value."

"A waste!"

"Program often assumes bottom division go to Putnam/ Armed Forces/No college - often assumes top kids are college - No Putnam - etc.

"VERY SEXIST in presentation - 'even a girl could do this' - all teacher does is arrange trips & speakers."

"The speakers are not appropriate for these students."

"More involvement by local businesses in the form of speakers & field trips. This does not take a full time teacher."

"No consistency in career & classroom presentations"

"Students need a career awareness day at their school, displays with films, demonstrations, pamphlets; industry, academics & armed forces, medicine, fire, police, etc."

"I don't think students were made aware of career possibilities in Physical Education i.e., umpire, referee, clothing design, landscaping (golf) sporting good selling & manufacturing."

"I've had no contact with Career Awareness - having taught grades 7 & 8. I believe these grades could have benefited also - haven't."

"does not provide teachers with adequate means to incorporate career awareness into classroom."

"Inform all teachers about what has been done during the year so they can evaluate the program. I know the program exists, but have not been involved."

"Great idea for program, but need for more awareness of possibilities by its teacher/coordinator and regular classroom teacher; more communication between two staff areas, orientation meeting for more input, periodic meetings throughout the year (feedback), perhaps more & varied trips than to companies, businesses, films, speakers, non-traditional career choices, perhaps room for student imput as to their needs, concerns, desires, but much need for career education. I want to see it maintained (with changes) on some level..."

The last few comments, together with the results of the final table point to some concerns. First, there is a need for better coordination, communication, and contact between classroom teachers and resource persons. There is also a need to involve more classroom teachers in the program. Finally, the career programs must meet the needs of all students in the school, from the most capable to those least capable, but must be careful not to pre-judge or cast students into a particular mold. Rather, students of all ability levels must be allowed to explore a wide range of career possibilities.

Recommendation

A career awareness program should have two purposes: 1.) to offer direct services to all youngsters through classroom lectures, career surveys, field trips, and guest speakers, to expose students to the wide range of possibilities available to them in the world of work and 2.) to provide skills, resources, or materials for classroom teachers so that they might incorporate a greater awareness of careers into their everyday teaching. Career awareness programs, particularly those on the junior high school level, have not been as helpful to classroom teachers as they could be, perhaps because these programs have placed an overemphasis on direct services to students. It is recommended that the career awareness programs, particularly those operating on the junior high school level, provide for more involvement of classroom teachers and place a greater emphasis on providing skills, resources, or materials for classroom teachers so that teachers might be able to better communicate the importance of what is being learned today to the world of work in the future.

TABLE C1

Mean Raw Score by School
Occupational Questionnaire
Secondary Career-Awareness Programs

School	N	Mean Score Pre	Pst	Dif	T
Che	68	22.1	30.6	+8.5	+19.52*
Kil	77	22.4	24.4	+2.0	+04.22*
Van	89	21.1	23.9	+2.8	+ 5.66*
Total	234	21.8	26.0	+4.2	+12.75*

*P < .01

TABLE C2

Mean Raw Scores by Year

Occupational Questionnaire

Three-Year Comparison

Year	N	Mean Score Pre	 Pst	 Dif	T
82-83	137	22.3	26.7	+4.4	+ 9.07*
83-84	215	21.4	26.2	+4.8	+15.41*
84-85	234	21.8	26.0	+4.2	+12.75*

$*P < .01$

TABLE C3

Percent of Students with Improved Scores by School
Occupational Questionnaire
Secondary Career - Awareness Programs

School	Total N	Improved N	Improved %
Che	68	67	99%
Kil	77	49	64%
Van	89	59	66%
TOTAL	234	175	75%

TABLE C4

Percent of Students with Improved Scores by Year
Occupational Questionnaire
Three-Year Comparison

Year	Total N	Improved N	Improved %
82-83	137	104	76%
83-84	215	186	87%
84-85	234	175	75%

TABLE C5

Student Perceptions of Career Awareness Programs

By School

		Percent of Responses "Strongly Agree" or "Agree"			
	N=	70	69	68	207
	Statement	Che	Kil	Van	Total
1.	I enjoyed participating in the Career Awareness Program.	100%	99%	96%	98%
2.	This program helped me to see how my studies in school relate to the world of work.	100%	99%	94%	98%
3.	This program interested me in some careers I hadn't thought about before.	86%	80%	87%	84%
4.	This program helped me to learn more about what are some of my interests in life.	90%	87%	99%	92%
5.	This program helped me to learn more about good work habits.	96%	70%	88%	85%
6.	Because of this program, I will be able to make a better decision about a possible career.	93%	86%	93%	90%

TABLE C6

Classroom Teacher Perceptions of Chapter 636 Career Awareness Programs

Success Rating of Objectives

Seven-Point Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

	Mean Success Rating					
N=*	5	7	17	23	21	**73**
Objective	Lib	Was	Che	Kil	Van	**Total**
1. Increasing student knowledge of the career possibilities available to them	6.80	5.71	5.47	5.18	4.14	**5.11**
2. Providing teachers with new ideas as to how to infuse career awareness into their teaching	6.40	5.43	4.47	3.83	2.86	**4.03**
3. Increasing the utilization of outside resources (i.e. speakers, field trips) to provide students with first-hand information about careers	6.00	6.43	6.18	5.22	4.14	**5.30**
4. Increasing student awareness of the many non-traditional career possibilities which are available	6.40	5.29	5.18	4.68	4.19	**4.83**
5. Assisting students in making a more informed decision about their choice of high schoools	4.25	5.17	5.35	4.91	4.05	**4.74**

*Not all teachers responded to each item

D. Program Evaluation: Cultural Enrichment

Art

Music

Theatre Arts

Field Trips

D. Program Evaluation: Cultural Enrichment Programs

Eighteen schools funded one or more programs in the area of cultural enrichment which included art resource teacher programs, music resource teacher programs and theater arts programs. A number of schools also funded field trips for cultural and/or academic enrichment programs. Six schools provided Chapter 636 funding for art enrichment programs. One objective of the art programs was that students would improve their skills in using a wide variety of art media. It was also expected that students would become more aware of the contributions of other cultures to art and would have a greater tendency to form cross-racial friendships as a result of regular opportunities to work together with other students on various art activities. Interaction was encouraged.

Programs varied from school to school depending upon the needs and desires of the staff within each school. For example, the art resource teacher program at Freedman focused on shapes, forms, and lines, learning art concepts, and basic art vocabulary, though the program responded to requests from teachers for specific art projects. Activities were designed to provide a variety of experiences in different media and to develop hand-eye coordination, math skills, and discipline.

Programs at Harris and Pottenger were skill oriented, starting with crayon manipulation at the kindergarten level to more sophisticated tools at the fourth grade level. Many art lessons were designed so that students would interact with one another, thus furthering the goals of integration.

At New North an important aspect of the art program was introducing students to the art of other cultures. For example, students were introduced to the work of black American artists and African crafts and were involved in activities including Chinese brush painting, calligraphy, American Indian, Eskimo, Mexican, and South American crafts, masks from different cultures, and African stenciling. In celebration of Chinese New Year, students also made large animal kites. Assistance in making props, scenery, and costumes for plays were also provided by the art center at New North.

The art program at Warner began with lines and continued to forms, shapes, color, and texture emphasizing the development of art skills and concepts through a variety of "building-block" experiences. Interaction of students was encouraged as was sharing of school materials. The project teacher and a number of students were also involved this year in preparing sets and costumes for the school production of "The Electric Sunshine Man".

Classroom teachers at the six schools with art resource teacher programs were asked to judge how successful the art programs were in attaining each of six objectives, using a seven-point success rating scale from 1 (Very UNsuccessful) to 7 (Highly Successful) (see Table D1). Ratings on each objective by school ranged from a low of 3.75 to a high of 7.00. Most successful objective, according to teachers, was increasing student interest and enthusiasm for art, with a mean rating of 6.11. Two other objectives, improving student skills in using a wide variety of art materials and providing a higher quality art program than classroom teachers could provide also had ratings of 6 or higher. Least successful objective, with a mean rating of 5.49, was increasing student exposure to art of other cultures. Only one school had a rating of better than 6 on this objective while one school had a rating below 4. There appears to be a need for greater emphasis on introducing students to the art of other cultures, a need which has been cited in previous reports as well.

An underlying goal of Chapter 636 art programs is to enhance integration by increasing student understanding of other cultures (as above) and by providing regular opportunities for students to interact with one another. According to classooom teachers, the mean success rating of the art programs at increasing the tendency for students to form cross-racial friendships was 5.71, an indication of a good degree of success. Sociogram analysis at the six schools, however, indicated that at only three of the six schools did the percentage of selections that were cross-racial increase this year compared to last year while the overall CRS rate at the six schools remained constant. However, two of the schools with increases this year, Freedman and Warner, had an art program for the first time this year. The new art programs at these two schools may have been at least in part responsible for the increase in cross-racial selections there.

Classroom teacher comments concerning Chapter 636 Art Programs were positive, though there was some concern with the variety of art media being used at a few schools, perhaps because of a lack of city funds to purchase such media. Some of the art teachers also commented about the lack of materials. Sufficient funds should be set aside in the original Chapter 636 project proposal to cover expenditures for an art program so that necessary materials can be purchased. Specific teacher comments included the following:

> "This is the best art program I have ever seen in Springfield Schools. This teacher has shown the children more art techniques than I have ever seen before. I, too, have learned so much. The children work well together under her direction."
>
> "Excellent program."
>
> "Great program!"
>
> "Super experiences for our Special Ed. L.D. students. They showed great growth!"
>
> "There have been no demands for conformity or perfection placed on the children so they have all felt successful whether budding artists or not. They have been praised for originality of ideas and have learned many new techniques as has their teacher. It has been an excellent program."
>
> "The teacher has always been very willing to cooperate with us though he is most creative on his own."
>
> "The need for exposing students to other cultures was discussed. It was decided to pick various cultures and use the 'chosen' culture as the focus (changing cultures every few months."
>
> "Because of Proposition 2½ some materials are not available!"
>
> "Greater variety of media should be used."
>
> "We need money for supplies to increase the variety of art materials."
>
> "Shortage of materials made this program very difficult."

> "Need for use of different types of art materials."
>
> "We definitely need an Art teacher but his or her enthusiasm for the subject would definitely improve the quality of experiences in Art. We need new teaching ideas and techniques and we have not been getting them. Please consider this in placing an art teacher at this school in the future."
>
> "I feel the art teacher could put much more effort into using different techniques in art rather than drawing etc. which can be done in the classroom. Our request for an art teacher is to help us to learn new techniques from someone with the expertise."

Nineteen schools funded Chapter 636 music resource teachers. At most schools part-time music resource teachers provided part of the basic music instruction for all students on a regular basis and also conducted choruses and special enrichment instrumental classes, though at New North and Van Sickle the music teacher instructed students in the school piano lab. As part of the Chapter 636 Music Program students learned about famous composers, learned music theory and concepts, sang a variety of songs representative of different cultures, played a variety of instruments, composed music, participated in talent shows, musical productions, choral groups, and bands, and performed in schools, local malls, and nursing homes.

Objectives of the Chapter 636 Music Program were that students would demonstrate improved mastery of music concepts, would become more aware of the contributions of other cultures to music, and would show an increased tendency to form cross-racial friendships through regular participation of students in group musical activities and through multicultural curriculum content.

The Music Achievement Test (MAT), a nationally normed test, was given midyear to all grade 4 students at schools with Chapter 636 music resource teacher programs. Higher scores this year than last would give evidence of improved mastery of music concepts. Totally, and at nine of the twelve schools tested, MAT scores this year were higher than those during the previous testing year (see Table D3). National percentile was also higher than last year, equaling the highest level yet, though still below the national norm. Examining this year's results by subtest area, it appears that students are still below the national norm on pitch discrimination, the ability to determine which musical tones are higher and which are lower, and interval discrimination, recognition of distance between pitches, but are above the norm on meter, determining the number of beats per measure (see Table D4). Though greater emphasis in the first two areas may be warranted at schools with Chapter 636 music resource teacher programs, the quality of the test recording in the first two test areas may be a factor in the results, in the opinion of this evaluator.

Classroom teachers were surveyed concerning their perceptions of how successful the Chapter 636 music program had been in accomplishing its objectives using a seven-point success rating scale from 1: Very UNsuccessful, to 7: Highly successful (see Table D5). Ratings by school ranged from a low of 3.67 to a high of 7.00. Four objectives (increasing student understanding of musical concepts, increasing student interest and enthusiasm for music, providing a higher quality music program than classroom teachers could provide, and increasing students' exposure to music of other cultures) had success ratings of 6.00 or higher indicative of very successful accomplishment. Least successful objective, with a rating of 4.87, was increasing parent involvement in school activities (i.e., through musical performances and programs). It appears that a greater effort needs to be made to bring parents into the schools to view musical programs or performances.

Enhancing integration was also a goal of Chapter 636 music programs. According to the teacher survey, the music program was successful in increasing the tendency for students to form cross-racial friendships as evidenced by a mean success rating of 5.72. Sociograms were also administered at the schools with Chapter 636 music programs to see if integration had improved. A music program, of course, is only one of many programs in the school setting but is, nevertheless, one which provides students with opportunities to interact with other students, to work together with other students on a regular basis, and to learn about the musical contributions of other cultures. Comparison of cross-racial selections this year at the eighteen elementary schools with Chapter 636 total school music programs with those of last year shows that there was an increased cross-racial selection rate at 11 of the 18 schools and also totally, an indication of improved integration (see Table D6). It appears that the Chapter 636 music programs are an effective means of enhancing integration.

Chapter 636 music teachers were generally pleased with their programs during the past year. Teachers at a few schools, however, noted the need for materials and equipment, i.e.:

> "One needs a decent tapeplayer in order to do anything effective in the listening program. The equipment I use is, to put it bluntly, not adequate."
>
> "There is a need for more availability of materials if requested."

As recommended for art programs, sufficient funding should be allocated for each Chapter 636 program to cover the cost of necessary materials.

Classroom teachers generally had very positive comments concerning the Chapter 636 Music Program, though teachers at a few schools felt that more emphasis was needed in the area of music concepts and less emphasis was needed on rote singing. Specific teacher comments included the following:

> "Excellent Program with great programs to encourage integration. Children had opportunity to share their expertise with other schools and public. Excellent teacher!"
>
> "The class has been introduced to a variety of songs as well as having chances to express themselves with the various instruments available. This lets them know there is a great deal more to music than just Rock and Roll."
>
> "Excellent program."
>
> "Highly successful!"
>
> "This program has helped my students to focus less on the differences in people and more on the simi-

larities among people. With the help of the Reading Enrichment teacher and Music teacher, we studied the lives and interests of the African people and presented an African Cultural Fair for other students in our school. As a Special Needs teacher, I am most appreciative of 636 help."

"Good student interest in music"

"An excellent program, I can not say enough about the success of it."

"The best Chapter 636 program I have ever been involved in - Give all the credit to the music teacher!.

"Talented music instructor reached students in a deeper musical sense - thus providing classroom teacher with new insights for future academic and musical use with youngsters."

"Music motivates the kids very much."

"This program is great. The music teacher's talent and enthusiasm carried over to the children."

"636 music teacher has terrific rapport with students, is amazing in his effort to provide instrumental music lessons, & directs a chorus which is enjoyed by members and by those attending performances.

Teacher goes far beyond in his adaptation to needs of students & classroom teachers and is most willing to teach songs related to current classroom units of study."

"Good program - children find it enjoyable & educational."

"The Choral program at this school enhances self-confidence in each youngster who participates in this group musical effort. A means to improved self-image for these children."

"We should continue with it, however, the time allotment should increase from 30 minutes a week to at least 45 minutes a week."

"Valuable program - provides more than teacher could - good experience with school chorus, class programs, etc. Could perhaps emphasize music notation, structure and theory more."

"More use of musical instruments might spark student interest."

"Should be more singing, less written work, greater variety of cultural music - black, Puerto Rican, etc."

"I would like to see more emphasis placed on the mechanics of music, not just learning new songs, in the lower grades."

> "I think it would have been more educational if less emphasis were placed on rote singing. I feel some music theory would have been good."
>
> "More music concepts necessary. Music books needed."
>
> A sharing of ideas among staff at various schools or/and the development in a workshop of curriculum suggestions would also be beneficial."

Another cultural enrichment program was the theater arts program at New North. The theater arts program was designed to complement and enhance any area of the curriculum. The program's main objectives, by providing experiences in the performing arts for each child, were to improve students' skills in oral expression, to increase students' enthusiasm for the performing arts and, by teaching students how to work more cooperatively with other students as a team, to enhance integration.

The scheduling of the theater arts program was complex. Although it was part of the language arts program, it was also integrated into many other areas of the curriculum. The scheduling involved 45 minute blocks from the language arts program. If other time was needed, it was scheduled during mini-course time or center time. The schedule continually changed as needed.

Theater arts activities ranged from large musical productions and small plays to creative drama classes, movement and dance, scenery design, play writing, singing, make-up techniques, puppetry and choral speaking, as well as T.V. productions and fashion shows. Students were introduced to the physical plant of the theater, and also participated in creative drama sessions which included some theater games, pantomime, and improvisation. Productions this year included "The Sound of Music", "Sleeping Beauty", "Tom Sawyer", "Pinocchio", "el circo", and "James and the Giant Peach". A large number of students from lower elementary schools attended one or more productions this year as a means of magnet recruitment and, at this writing, the effort had paid off with a large increase in magnet students at New North.

Classroom teachers at New North were asked how successful they felt the Theater Arts Program was at accomplishing each of six objectives, using a rating scale from 1: Very UNsuccessful to 7: Highly Successful (see Table D7). Most successful objective was increasing student interest and enthusiasm for the performing arts (with a mean rating of 6.69). Two other objectives (improving the ability of students to express themselves orally and providing greater opportunities to perform than classroom teachers could have provided) also had success rating of better than 6.00. Least successful objective was providing teachers with new ideas, though rating for this objective was still far above average, particularly considering that the program has been in effect at New North for many years

Enhancing integration was also a goal of the Theater Arts Program. Though this program was only one of several operating at New North it was expected that there would be an increase in cross-racial friendships compared to last year. Though teachers felt that the program was successful in increasing the tendency for students to form cross-racial friendships, analysis of sociograms indicated that the cross-racial selection rate at New North declined, from 41% last year to 37% this year.

Students at many elementary and secondary schools participated in field trips which were underwritten entirely or partially by Chapter 636. Objective of Chapter 636 field trips was to provide effective educational experiences for students outside the classroom setting as indicated by the teachers participating in the field trips. Chapter 636 full or partial funding of field trips made it possible for a great many students to participate in field trips which would otherwise have been impossible.

Teachers who accompanied students on field trips were asked to complete evaluations concerning the type of field trip and the effectiveness of the field trip. According to teachers, the greatest percentage of field trips this year were for academic or cultural enrichment, as was the case in each of the last four years as well (see Table D8 and Graph 1).

In Table D9, teacher overall success ratings (on a scale from 1: Very UNsuccessful to 7: Highly Successful) are given for each reported field trip location. As seen there, all trips were very successful. Success ratings ranged from a high of 7.00 (at 28 of 44 sites) to a low of 5.33 (still above average).

Teacher evaluations of the field trips on seven different dimensions are given in Table D10. As indicated there, teachers had very positive feelings about the field trips on each dimension. Mean rating on each dimension was greater than 6 and almost to the end of the scale. Teacher mean rating of the field trips this year were slightly lower than those of last year, with higher ratings only on the "valuable" and the "educational" dimensions (see Table D11).

Teacher perceptions of the field trips, as given in Table D12, were very positive as teachers unanimously felt that the field trips enhanced the educational program, stimulated school discussions and activities, and were worth taking again. Most teachers also agreed that field trips enhanced integration and that the staff at the field trip sites were cooperative. These perceptions were consistent with those of previous years.

Teacher comments included the following:

> "The company did everything they could to accommodate us. Everyone was knowledgeable and friendly. The children saw a lot and learned a lot."
>
> "The cultural and education enrichment to these students was tremendous. A special thanks to 636 for making this possible!"
>
> "The trip was very enjoyable - the children were well behaved and the play was perfect - right at their level."
>
> "A good time was had by all!
> The students behaved beautifully -
> and the play was culturally and academically
> enriching!"
>
> "Everything went perfectly. The bus arrived in plenty of time, our students behaved quite well and the play seemed of interest to all. One N.H.S. member actually stated afterward, 'That was fabulous!'

I thought it especially effective since Classical and Commerce students interacted sociably after the play. Our students were also given a chance to observe and interact with students from Connecticut and New York."

"Valuable field trip - worth repeating. Gave students valuable information on various career possibilities."

"Excellent learning(students,multi-cultural) experience for students from different backgrounds. Parents were very helpful."

"This was a very worthwhile trip. I think field trips are a good experience for children to go elsewhere than just stay in a school setting all the time."

"It was a most pleasant and educationally enriching experience. The guide was extremely good. She was competent and knowledgeable with a wonderful way with children."

"The trip was very enjoyable - I would recommend it for all classes."

"The field trip to the Science Museum is so rewarding & such a great learning experience for both my students and myself."

"Going to the Science Museum should be a part of the Spfld. curriculum (areas of social, science, art, etc.)."

"The children enjoyed the production at Stage West. They were exposed to a new experience."

"This field trip was both a pleasant and a worthwhile experience for our students."

"The docents at the museum were excellent. They explained all of the art work that pertained to our Japanese Program, and they kept the interest of all the students."

"Field trip went very smoothly. Students were cooperative and generally enthusiastic about the exhibits. The special educational programs (Illusions, museum & Dolphin sea lion show, aquarium) were extremely informative and exciting."

"Everyone thoroughly enjoyed the performance. The use of bilingual scenes was great."

"My students were thrilled to be able to hear Spanish spoken outside of class and to check their own ability and progress."

Recommendations

1. Several classroom teachers and Chapter 636 art teachers commented on the lack of a sufficient variety of materials or sufficient materials for the Chapter 636 Art Programs. Considering the decrease of available City funding for materials, it would seem necessary that sufficient funding be provided within each Chapter 636 Cultural Enrichment Program to cover the cost of necessary material to satisfactorily carry out the program.
2. The least successful aspect of the Chapter 636 Art Programs was increasing student exposure to art of other cultures. As has been stated in previous evaluation reports, a greater emphasis must be made to introduce art of other cultures. It is recommended that all Chapter 636 Art Resource Teachers plan a variety of activities this year to introduce students to art of other cultures, correlated when possible to classroom unit of study.
3. Music Achievement Test scores were higher this year than last year, but low scores were still recorded in pitch discrimination and interval discrimination. A greater emphasis needs to be placed in these two areas.

TABLE D1

Classroom Teacher Perceptions of Chapter 636 Art Programs

Success Rating of Objectives

Seven Point Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

				Mean Success Rating				
	N=*	10	12	17	13	21	15	88
	Objective	Fre	Har	How	New	Pot	War	Total
1.	Improving student skills in using a variety of art materials	7.00	3.92	6.71	6.46	5.43	6.67	6.01
2.	Increasing student interest and enthusiasm for art	7.00	4.67	6.76	6.38	5.57	6.47	6.11
3.	Providing a higher quality of experiences in art than classroom teachers could have provided	7.00	4.08	6.94	5.92	5.48	6.60	6.00
4.	Increasing student exposure to the art of other cultures	5.70	3.75	6.38	5.85	5.43	5.60	5.49
5.	Increasing the tendency for students to form cross-racial friendships by providing students with opportunities for successful interaction	6.30	4.50	6.73	5.77	5.14	6.00	5.71
6.	Providing teachers with new teaching ideas or techniques in art	6.90	4.00	6.35	5.77	5.33	6.53	5.80

*Not all teachers responded to each item

TABLE D2

Average Cross-Racial Selection Rates
Schools with Chapter 636 Art Programs
1983-84 Compared to 1984-85

	Percentage of Selections That Were Cross-Racial	
School	1983-84	1984-85
Fre	36%	40%*
Har	33%	32%
How	50%	40%
New	41%	37%
Pot	43%	50%*
War	40%	51%*
Total	41%	41%

*CRS rate for 1984-85 > CRS rate for 1983-84

TABLE D3

GRADE 4 MUSIC ACHIEVEMENT TEST (MAT) RESULTS
SIX-YEAR COMPARISON

	N						TOTAL RAW SCORE						TOTAL NATIONAL PERCENTILE					
SCHOOL	79-80	80-81	81-82	82-83	83-84	84-85	79-80	80-81	81-82	82-83	83-84	84-85	79-80	80-81	81-82	82-83	83-84	84-85
BRI	90	97	--	--	59	61	32.0	33.0	----	----	36.4	38.0	11	13	--	--	24	29
BRU	128	117	94	84	61	76	39.7	39.4	41.3	38.6	36.6	39.4	34	33	40	31	24	33
DEB	53	43	39	41	52	53	35.2	38.0	36.0	36.6	38.1	38.4	20	29	22	24	29	30
DOR	65	41	42	32	41	24	31.5	33.6	37.3	37.3	38.3	41.5	9	15	27	27	30	41
HAR	73	75	71	88	46	56	37.5	43.8	40.1	36.8	39.4	48.1	28	50	35	25	33	63
HOM	65	65	--	--	--	43	36.4	36.6	----	----	----	41.9	24	24	--	--	--	43
KNS	78	82	94	79	67	70	32.9	35.3	37.4	36.9	38.0	33.6	13	20	27	26	29	15
LIN	69	74	--	--	76	65	33.0	34.4	----	----	36.8	39.2	13	17	--	--	25	32
POT	84	109	118	--	44	77	31.5	34.1	35.5	----	35.4	42.6	9	16	21	--	20	45
SIX	91	115	--	--	--	81	44.8	47.0	----	----	----	40.4	53	60	--	--	--	37
TAL	85	61	--	62	68	57	35.4	34.0	----	37.6	36.8	40.6	20	16	--	28	25	37
WHI	100	97	70	70	40	58	37.5	38.1	38.1	38.8	37.6	35.7	27	29	29	31	28	21
TOT	720	635	410	521	554	734	36.8	39.8	38.7	36.7	37.3	39.8	25	34	31	25	27	34

TABLE D4

GRADE 4 MUSIC ACHIEVEMENT TEST RESULTS BY SUBTEST

		RAW SCORE				NATIONAL PERCENTILE			
SCHOOL	N	1 PITCH	2 INTERVALS	3 METER	TOTAL	1 PITCH	2 INTERVALS	3 METER	TOTAL
BRI	61	10.0	13.3	14.7	38.0	27	36	53	29
BRU	76	11.5	12.4	15.6	39.4	35	26	60	33
DEB	53	9.6	13.9	14.9	38.3	24	44	61	30
DOR	24	9.6	15.7	16.2	41.5	25	64	64	41
HAR	56	12.1	13.6	22.4	48.1	38	39	92	63
HOM	56	12.5	13.5	15.8	41.9	41	39	61	43
KNS	70	9.0	11.7	12.9	33.6	21	20	41	15
LIN	65	10.6	13.8	14.7	39.1	31	43	54	32
POT	77	10.0	13.0	19.7	42.8	27	32	84	46
SIX	81	10.6	13.7	16.1	40.4	30	42	64	37
TAL	57	11.0	13.9	15.6	40.6	33	46	60	37
WHI	58	9.7	12.4	13.5	35.7	25	26	45	21
TOT	734	10.6	13.2	16.0	39.8	30	35	63	34

TABLE D5

Classroom Teacher Perceptions of Chapter 636 Music Programs

Success Ratings of Objectives

Seven-Point Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

	Mean Success Rating																		
N=*	5	8	14	11	7	10	14	12	7	16	17	14	21	10	10	10	14	13	213
Objective	Bri	Bru	DeB	Dor	Ell	Fre	Gle	Har	Hom	Kns	Lin	New	Pot	Six	Sum	Tal	War	Whi	Total
1. Improving student understanding of music concepts	6.80	6.75	6.36	6.09	6.00	6.60	6.71	5.58	5.29	6.63	6.12	6.43	5.[illegible]	5.90	4.60	4.80	6.50	6.77	6.13
2. Increasing student interest and enthusiasm in music	7.00	6.50	6.64	6.45	6.00	6.60	6.86	5.83	6.14	6.56	6.24	6.00	5.86	6.70	5.10	5.70	6.43	6.69	6.28
3. Providing a higher quality of experiences in music than classroom teachers could have provided	7.00	6.88	6.71	6.45	6.71	6.90	6.86	6.00	4.57	6.88	6.24	6.64	6.14	6.40	5.60	4.90	6.57	6.85	6.38
4. Increasing student exposure to music of other cultures	7.00	6.63	6.43	5.73	6.14	6.30	5.79	5.58	4.57	6.56	5.88	6.64	5.48	6.30	5.30	4.50	6.36	6.77	6.00
5. Increasing the tendency for students to form cross-racial friendships by providing students with opportunities for successful interaction.	5.75	6.63	6.57	6.00	5.14	6.30	6.36	5.17	4.57	5.53	5.12	5.57	5.30	6.20	5.10	5.30	6.00	6.50	5.72
6. Involving more parents in school activities	5.25	5.14	5.79	4.18	4.86	5.56	5.00	3.67	4.14	4.53	4.59	5.07	4.00	5.33	4.40	4.20	6.07	6.50	4.87
7. Providing teachers with new teaching ideas or techniques in music	6.60	6.50	6.07	5.82	6.14	6.30	6.71	5.50	4.57	6.50	5.41	5.86	5.7[illegible]	5.70	4.80	4.00	6.50	6.77	5.85

*Not all teachers responded to each item

TABLE D6

Average Cross-Racial Selection Rates
Schools with Chapter 636 Music Programs
1983-84 Compared to 1984-85

School	Percentage of Selections That Werè Cross-Racial 1983-84	1984-85
Bri	29%	42%*
Bru	32%	46%*
DeB	53%	44%
Dor	53%	47%
Ell	36%	51%*
Fre	36%	40%*
Gle	47%	55%*
Har	33%	32%
Hom	47%	53%*
Kns	48%	56%*
Lin	32%	28%
New	41%	37%
Pot	43%	50%*
Six	27%	43%*
Sum	41%	49%*
Tal	41%	40%
War	40%	51%*
Whi	44%	44%
Total	40%	44%

*CRS rate for 1984-85 > CRS rate for 1983-84

TABLE D7

Classroom Teacher Perceptions of the New North Theatre Arts Enrichment Program

Success Rating of Objectives

Seven Point Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

	Objective	Mean Success Rating
1.	Improving the ability of students to express themselves orally	6.62
2.	Increasing student interest and enthusiasm for the performing arts	6.69
3.	Providing greater opportunities for students to participate in performances than classroom teachers could have provided	6.54
4.	Increasing the tendency for students to form cross-racial friendships by providing students with opportunities for successful interaction	5.85
5.	Involving more parents in school activities	5.85
6.	Providing teachers with new teaching ideas or techniques in theatre arts	5.77

Graph D1

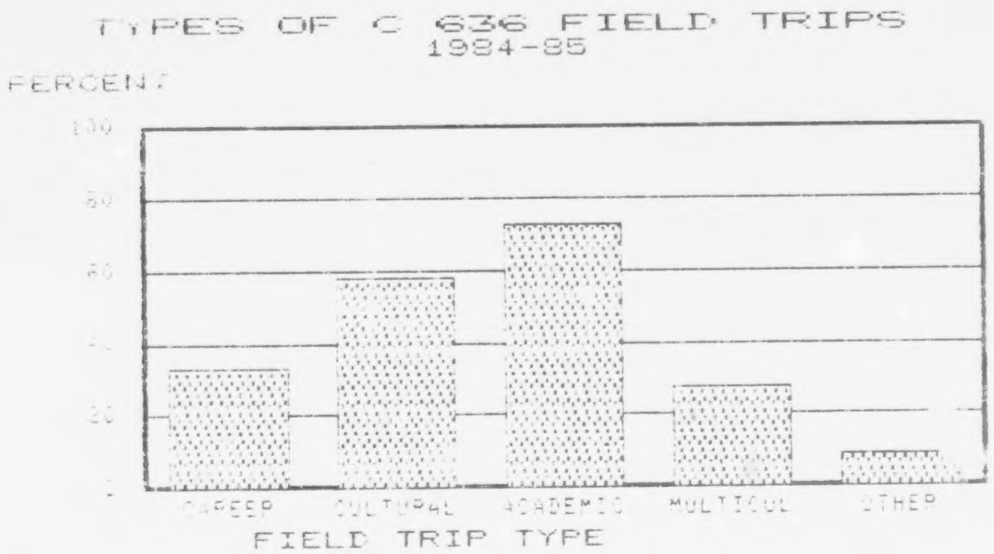

TYPES OF C 636 FIELD TRIPS
1984-85
PERCENT
100
80
60
40
20
0
CAREER
CULTURAL
ACADEMIC
MULTICUL
OTHER
FIELD TRIP TYPE

TABLE D8

Categories of Chapter 636 Program Related Field Trips

Five-Year Comparison

	Percent of Field Trips				
Category	80-81	81-82	82-83	83-84	84-85
Career Awareness	25%	27%	51%	33%	33%
Cultural Enrichment	63%	61%	71%	56%	58%
Academic Enrichment	77%	66%	72%	75%	73%
Multicultural Awareness	24%	27%	37%	34%	28%
Other	12%	9%	7%	14%	9%

*Percents total more than 100% as some trips fit into more than one category.

TABLE D9

Mean Overall Success Rating of Chapter 636 Program Related Field Trips by Site

Seven-Point Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

Field Trip Site	Mean Rating
AIC Foreign Language Day	6.00
Barnes Airport	7.00
Bassett Printing Company	7.00
Bluebird Acres	7.00
Boston Aquarium	5.75
Boston Science Museum	5.33
Boston State House	7.00
Bronx Zoo	6.00
Brookline Museum of Transportation	6.00
Career Development Institute	6.00
Compugraphic Corporation	7.00
Culinary Institute of America	6.00
Digital Equipment Corporation	7.00
Duxbury: Drama Competition	7.00
Essex Steam Train and Boat Ride	7.00
Forest Park	7.00
Hamilton Standard	7.00
Hartford Childrens' Musuem	7.00
Hispanic Dance Festival	7.00
Holyoke Community College	6.00
Kidder Stacy Company	7.00
Laughing Brook Wildlife Sanctuary	7.00
Look Park	7.00
Mark Twain Memorial	7.00
Marriott Hotel	7.00
Masonic Temple Drama Performance	7.00
Milton Bradley	6.75
Monson Developmental Center	7.00
New North Theater Arts Performance	6.50
New York Museum of Art	7.00
New York Theater Performance	7.00
Northfield Mountain	7.00
Smith Museum	6.33
Springfield Newspapers	7.00
Springfield Science Museum	6.29
Stage West Theater Performance	6.67
Stanley Park	7.00
State Line Potato Chip Factory	7.00
Stratford Shakespeare Theater	7.00
Sturbridge Village	6.67
UMass Dairy Farm	6.75
UMass Theater Performance	7.00
Westfield State College Career Awareness Day	7.00
Worcester Science Center	6.75

TABLE D10

Teacher Ratings of Field Trips

	Percent Selecting Each Rating							
	Very						Not	Mean
Category	7	6	5	4	3	2	1	Rating
Effective	70%	19%	7%	3%	0%	1%	0%	6.53
Valuable	78%	17%	3%	2%	0%	1%	0%	6.67
Enjoyable	76%	20%	3%	1%	1%	0%	0%	6.68
Informative	78%	14%	4%	3%	1%	0%	1%	6.61
Educational	79%	17%	1%	2%	1%	0%	0%	6.72
Enriching	80%	13%	4%	2%	1%	0%	0%	6.70
Appropriate	82%	11%	4%	0%	3%	0%	0%	6.70
Overall Successful	77%	18%	2%	2%	1%	1%	0%	6.64

TABLE D11

Teacher Mean Ratings of Field Trips

Six-Year Comparison

Category	Mean Rating (7 Point Scale) 79-80	80-81	81-82	82-83	83-84	84-85
Effective	6.35	6.74	6.42	6.64	6.65	6.53
Valuable	6.41	6.72	6.46	6.71	6.66	6.67
Enjoyable	6.54	6.78	6.60	6.66	6.79	6.68
Informative	6.48	6.75	6.56	6.66	6.61	6.61
Educational	6.47	6.74	6.66	6.72	6.64	6.72
Enriching	6.53	6.78	6.64	6.72	6.75	6.70
Appropriate	6.49	6.83	6.54	6.75	6.71	6.70
Overall Successful	----	6.68	6.57	6.63	6.71	6.64

TABLE D12

Teacher Perceptions of Field Trips

Six-Year Comparison

Statement	Percent "Strongly Agree" or "Agree"					
	79-80	80-81	81-82	82-83	83-84	84-85
a. This field trip enhanced the educational program by giving students first-hand experience of school learnings.	95%	100%	98%	98%	97%	100%
b. Field trips such as this enhance integration by giving students an opportunity to interact outside of school.	95%	98%	100%	95%	99%	98%
c. This field trip provided a stimulus for school discussions and activities.	98%	100%	100%	98%	97%	100%
d. The staff at the field trip site was cooperative.	100%	99%	98%	100%	99%	99%
e. I would take this field trip again another year.	94%	99%	94%	98%	99%	100%

E. Program Evaluation: Foreign Language Programs:

Amity Scholar

Conversational Spanish

Spanish Language Arts

Home-School Liaison

E. Program Evaluation: Foreign Language Programs

At a number of schools this year Chapter 636 funding was provided for programs in the area of foreign language. The Amity Scholar program was funded at Classical, Commerce, and Tech, conversational Spanish programs were funded at Sixteen Acres and Sumner, Spanish Maintenance programs were funded at Sixteen Acres, White Street, and Van Sickle, and Bilingual Home-School Communication programs were funded at Howard, Liberty, Sixteen Acres, and Van Sickle.

Some Chapter 636 funding at Classical, Commerce, and Tech was provided for the Amity Scholar Program this year. The Amity Scholars are teachers from abroad who spend one or two terms (10 or 20 weeks) in a community giving students an in-depth exposure to the culture of their native countries as well as conversational experiences in their native languages. Two scholars participated in the program this year, one a native French speaker and the other a native Spanish speaker. The scholars showed slides of their homelands, discussed topics of interest pertaining to their country, and respond to student questions regarding the life style of their native people. Objective of the program was that students and teachers would gain increased understanding of the language and the culture of the native speaker.

In the opinion of the foreign language teachers the Amity Scholar Program this year was only moderately successful in attaining its objectives (see Table E1). Average success ratings ranged from 3.80 to 4.80 on a 7 point scale (with 4 as the midpoint), with success ratings for the French program considerably below average. Most successful aspect of the program, according to teachers, was increasing student understanding of the foreign language. Teacher overall rating of this program, on a five-point scale from 1: Very Poor to 5: Very Good was likewise only fair, averaging 2.60 (see Table E2). Compared to four previous Amity Scholar Programs, the program this year was the least successful (see Table E3).

Basic flaw in the Amity Scholar Program this year, as has been pointed out by classroom teachers in previous years, was the lack of skill in teaching methods on the part of the Amity Scholar. As one teacher observed, the Amity Scholars are fairly successful as guest speakers but are not particularly successful as teachers. As has been recommended in previous years, there appears to be a need for more extensive preparation of the Amity Scholars in effective methods of teaching prior to their involvement in public school classrooms. Specific teacher comments included the following:

> "The Amity Scholars did not prepare class presentations well & lacked classroom "management" techniques."

> "The Amity Scholars lacked variety in their presentations."

> "This year's Amity Scholar was a personable enough young person but her attitude was not what I had come to expect from these scholars. She should have been more prepared - not only did she not have much material to share with the students - she had also not given much thought to which aspects of foreign life the students might be interested in. It was only toward the end that she finally came prepared with specific topics to be discussed. She appeared to feel that it was up to me to totally direct her activity without her giving any suggestions. When I did suggest activities, they were done briefly and in an uninteresting manner. She certainly did not take charge of her responsibilities and her efforts were minimal."

> "Better preparation of scholar in presenting materials. Her time was not well scheduled."

> "The individual was very disorganized. The individual had to be guided as to procedures to follow in the presentation of material. Total impact on class response and interest was considerably lacking and it was very boring at times. The individual seemed very inexperienced in dealing with the three classes."

> "The scholar, although very willing, did not possess a commanding presence and had to be directed very closely. A teacher who directed the conversation and her presentations could employ the scholar to the benefit of all."

> "An inherent weakness in this program is that so often the scholars are not any bit trained in teaching techniques; thus, they sometimes lose time and frustrate the students who cannot follow the intended lesson. As guest speakers they are fairly good."

Student perceptions of the Amity Scholar Program were more positive than those of foreign language teachers (see Table E4). All the students surveyed indicated that they enjoyed the program while 80% or more felt that the program helped them to learn more about the language they were studying and taught them a lot about the culture and country of the Amity Scholar, and felt that the program should be offered again next year. Overall rating for the program was good, averaging better than 4 on a 5-point scale and was actually higher than those of last year (see Table E5). Most valuable aspect of the program, according to students was learning about the culture of a foreign country first-hand, though the time spend with the Amity Scholar was, in the opinion of students, too short.

Conversational Spanish programs were funded at Sixteen Acres and Sumner. These programs enabled non-Spanish speaking students to learn simple Spanish vocabulary and also learn about the culture of Puerto Rico and other Spanish-speaking countries. At both schools instruction in the Spanish language was provided to all students in a classroom setting. In addition, students participated in activities to increase their understanding of other cultures. For example, students learned Spanish games, (i.e,. Ambo Sado, Pan y Queso), learned Spanish songs, and celebrated Spanish holidays (i.e., Discovery Day, Day of the Three Kings).

Objectives of Conversational Spanish Programs are that students will develop a greater understanding of Spanish culture and language and that this understanding will lead to enhanced integration between Spanish speaking and non-Spanish speaking students. Activities include introducing Spanish vocabulary through songs and games, dialogues between Hispanic and non-Hispanic children, discussions of history and culture, and a variety of art projects.

According to classroom teachers at the two schools the Conversational Spanish Program was very successful in attaining its objectives (see Table E6). The success ratings of four of the objectives: increasing student understandings of Hispanic culture, improving student skills in conversational Spanish, improving the attitude of non-Hispanic students toward Spanish speaking students, and increasing teacher understanding of Spanish language or culture were 6.00 or higher (on a seven-point scale) indicative of a high degree of success. Teachers also felt that the program was successful at stimulating friendships between Hispanic and non-Hispanic students, giving this objective a rating of 5.96. Least successful objective was improving student understanding of Spanish writing, though this was not a primary objective of the program. Classroom teacher comments pertaining to the Conversational Spanish Program were very positive as evidenced by the following:

Classroom Teacher Comments: Conversational Spanish Programs

> "Effective improvement of conversational skills - there has been no exposure to written Spanish."
>
> "The Spanish teacher has done an excellent job at this school. She deserved praise and much credit."
>
> "A positive program."
>
> "Our children were very fortunate to have this experience."
>
> "Very Good!"
>
> "An exciting Program - most worthwhile."

Sociogram results at Sixteen Acres and Sumner confirm the opinions of classroom teachers regarding the impact of the Conversational Spanish Program on formation of student friendships across racial/ethnic lines (see Table E7). The percentage of selections that were cross-racial at both schools were considerably higher this year than last year, and this increase, according to teachers, was at least in part due to the successful Conversational Spanish Program.

At Sixteen Acres, White Street, and Van Sickle, Hispanic students not in TBE were given the opportunity to participate in a Spanish Language Arts Program to increase their compentency in their native language. Activities included audio visual programs and student discussions and projects related to Hispanic culture and history, instruction in vocabulary, grammar, and syntax, and reading exercises using bilingual/bicultural stories to improve reading comprehension. In order to measure increased competency in Spanish, the LAB in both reading and writing was administered to third, fourth, and seventh grade students in the Spanish Language Arts Program on a pre-post basis. According to results of that testing, as given in Table E8, students did make progress in both their reading ability and writing ability in their native language. Raw score gains for both reading and writing at Sixteen Acres and White Street, were statistically significant, and 80% of the students at these two schools, the target figure, improved in reading and/or writing. Results at Van Sickle were not as significant, however, as less than 80% of the students showed improvement in reading or writing. Totally, almost 80% of the students improved in both reading and writing, and the percentage of students who improved in both areas was higher than last year (see Table E9). The Spanish Language Arts Programs were thus relatively successful this year in improving student skills in both Spanish reading and writing, though perhaps more so on the elementary level than on the junior high school level.

The Chapter 636 teacher of the junior high school program was concerned with the small number of magnet students who signed up for or completed the Spanish Language Arts Program. Due to the late start of the Spanish program, students decided to remain in an unprepared subject class (i.e., art, music, industrial arts) rather than take the Spanish course. In the opinion of the project teacher, the program would have been more successful if students had been scheduled for Spanish Language Arts during the summer and had begun immediately in September.

Four schools (Howard, Liberty, Sixteen Acres, and Van Sickle) used some of their appropriated Chapter 636 funding for home-school communication programs staffed by home-school liaisons or bilingual aides. The basic service provided by these programs was assistance in the communication process between the school and non-English speaking homes. Overall objective of the program was to improve home-school communication, particularly communication between teachers and Hispanic parents.

Activities of home-school liaisons at Sixteen Acres and Van Sickle were many and varied and included, in priority order, making or taking telephone calls, making home visits, meeting with principals or staff at the schools, interpreting in school, and participating in parent/school conferences (see Table E10). Indeed, in an average week, a home-school liaison made over 25 telephone calls, made almost 20 home visits, attended about 17 meetings with principals or staff and participated in 9 parent/school conferences. Activities of the bilingual aides were similar to the activities above, though with less frequency.

Classroom teachers were asked to judge the effectiveness of the home-school communication programs in accomplishing five objectives. Mean success ratings (on a seven-point scale from 1: Very Unsuccessful to 7 (Highly successful) ranged from 5.41 to 5.88, indicative of a successful program (see Table E11). According to teachers, the most successful accomplishment of this program was improving the quality of communication, between school personnel and parents (particularly at Sixteen Acres) while the least successful objective was increasing parent participation in school activities (particularly at Van Sickle). Specific teacher comments relative to the home-school communication programs were very positive, indicative of a successful program, as presented below:

Classroom Teacher Comments: Home/School Communication Programs

> "Mrs. ________ has been a great big "Plus" to all of us at our school."
>
> "Mrs. ________ is an excellent addition to our staff."
>
> "A truly fine, dedicated Lady!"
>
> "This is an invaluable program. Mrs. ________ has an excellent rapport with both the school and home communities."
>
> "Super !! Super!!"
>
> "Home-school communication program was excellent. Program worked due to her interest. Our Home-school person really cares."

> "Mrs.______was very helpful in getting students started in P.E. She contacted many parents for me to explain the rules and regulations - She let me know what students had a language problem (no English)."

> "I don't know enough about this, but what I've seen leads me to believe its maintenance in important."

Recommendations

Though Springfield has no control over selection or training of the Amity Scholar, there appears to be a need for some kind of training in teaching methods for these individuals, prior to placement and a need for the scholar to observe in the school setting prior to program initiation. It is recommended that the above be communicated to those who oversee the Amity Scholar Program.

TABLE E1

Teacher Perceptions of the Amity Scholar Program

Success Rating of Objectives

Seven Point Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

	Mean Rating		
N=	3	7	10
Objective	French	Spanish	Total
1. Increasing student understanding of the foreign language	2.33	4.43	3.80
2. Increasing student understanding of the culture of the native speaker	3.00	5.00	4.40
3. Increasing student interest and enthusiasm for the study of language	3.00	4.86	4.30
4. Providing teachers with greater insight into the culture of the native speaker	3.00	4.71	4.20

TABLE E2

Teacher Overall Ratings of the Amity Scholar Program

Five Point Scale: 1 (Very Poor) to 5 (Very Good)

Language	Rating
French	2.33
Spanish	2.71
Total	2.60

TABLE E3

Teacher Overall Ratings of the Amity Scholar Program

Five-Year Comparison

Five Point Scale: 1 (Very Poor) to 5 (Very Good)

Year	Rating
1980-81	4.55
1981-82	3.88
1982-83	5.00
1983-84	4.06
1984-85	2.60

TABLE E4

Student Perceptions of the Amity Scholar Program

	Percent "Strongly Agree" or "Agree"		
N=	17	48	65
Statement	French	Spanish	Total
1. I enjoyed participating in the Amity Scholar Program this year.	100%	100%	100%
2. This program has helped me to learn more about the language I am studying.	88%	77%	80%
3. I learned a lot about the culture and country of the Amity Scholar this year.	88%	88%	88%
4. I enjoyed my language class more this year because of the Amity Scholar Program.	82%	70%	73%
5. I think the Amity Scholar Program should be offered again next year.	100%	98%	98%
Overall Rating (Scale: 1 Very Poor - 5 Very Good)	4.59	4.29	4.37

TABLE E5

Student Overall Ratings of the Amity Scholar Program

Seven-Year Comparison

Year	Scale: 1 (Very Poor) - 5 (Very Good) Mean Rating
1978-79	3.98
1979-80	4.22
1980-81	4.36
1981-82	3.69
1982-83	4.42
1983-84	4.16
1984-85	4.37

TABLE E6

Classroom Teacher Perceptions of Chapter 636 Conversational Spanish Programs

Success Rating of Objectives

Seven-Point Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

	Mean Success Rating		
N=*	10	14	24
Objective	Six	Sum	Total
1. Increasing student understanding of Hispanic culture	6.50	5.79	6.08
2. Improving student skills in conversational Spanish	6.50	6.00	6.21
3. Improving student skills in understanding Spanish writing	6.25	4.31	5.05
4. Increasing the tendency for Hispanic and non-Hispanic students to form friendships with one another	6.60	5.50	5.96
5. Improving the attitude of non-Hispanic students toward students who speak a language other than English	6.40	5.71	6.00
6. Increasing teacher understanding of Spanish language and/or culture	6.50	5.71	6.04

*Not all teachers responded to each item

TABLE E7

Average Cross-Racial Selection Rates
Schools with Chapter 636 Conversational Spanish Programs
1983-84 Compared to 1984-85

	Percentage of Selections That Were Cross-Racial	
School	1983-84	1984-85
Six	27%	43%*
Sum	41%	49%*
Total	36%	47%

*CRS rate for 1984-85 > CRS rate for 1983-84

TABLE E8

LAB Test Results

Chapter 636 Spanish Language Arts Programs

				Mean Score				%
School		Lev	Subtest	Pre	Pst	Dif	T	Improved
Six	17	II	Reading	9.2	13.6	+ 4.4	+2.86*	71%
	16	II	Writing	5.3	10.5	+ 5.2	+4.38*	88%
Whi	12	II	Reading	10.3	20.9	+10.6	+5.67*	92%
	11	II	Writing	5.3	10.5	+ 5.2	+2.87*	73%
Van	10	III	Reading	17.7	21.2	+ 3.5	+2.13	70%
	10	III	Writing	12.5	14.6	+ 2.1	+1.18	60%
Total	39		Reading	----	----	-----	------	77%
	37		Writing	----	----	-----	------	76%

*P<.01

TABLE E9

Number and Percent of Students
Showing Improved Skills in Spanish
Chapter 636 Spanish Language Arts Programs
Two-Year Comparison

Year	Subtest	Total N	Improved N	Improved %
1983-84	Reading	20	14	70%
	Writing	20	13	65%
1984-85	Reading	39	30	77%
	Writing	37	28	76%

TABLE E10

Home/School Liaison Activity Summary

Activity	Average Per Day	Average Per Week
1. Making or taking telephone calls	5.18	25.89
2. Making home visits	3.84	19.20
3. Meeting with principal or staff	3.48	17.41
4. Making agency visits	0.19	0.95
5. Interpreting in school	1.86	9.28
6. Interpreting at a home	0.08	0.40
7. Participating in parent/school conference	1.84	9.20
8. Translating a letter or form	0.21	1.03

TABLE E11

Classroom Teacher Perceptions of Chapter 636 Home-School Communication Programs

Success Rating of Objectives

Seven-Point Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

		Mean Success Rating				
	N=*	18	5	10	18	51
	Objective	How	Lib	Six	Van	Total
1.	Improving the quality of communication between school personnel and parents	6.28	6.20	6.60	5.00	5.88
2.	Increasing parent participation at parent-teacher conferences	6.12	6.00	6.70	4.78	5.74
3.	Increasing parent participation in school activities	5.83	6.20	6.67	4.06	5.41
4.	Disseminating important information concerning the community to school personnel	6.29	6.40	6.60	4.24	5.65
5.	Disseminating important information concerning the school to parents/ community	6.29	6.40	6.80	4.72	5.84

*Not all teachers responded to each item

F. Evaluation Report: In-House Suspension Programs

Chapter 636 funding at three schools was allocated for in-house suspension programs. Funding provided for a teacher and aide at Glenwood and at Van Sickle and for a teacher and assistant teacher at Putnam. The programs at the three schools with in-house suspension programs were similar: short-term placement in a structured, self-contained classroom. The programs were also sometimes used for crisis intervention for students needing to "cool-off" for a short period of time. The Van Sickle program was additionally used as an academic intervention center for students needing a quiet, structured environment in which to do regular assignments or to make-up work missed due to absences.

A total of 30 students, an average of 7 students per day, were served by the program at Glenwood compared to only 20 students last year and an average of only 6 per day. Racial distribution of students served was 13% white, 40% non-white and 47% Hispanic, compared to a school population of 27% white, 21% non-white, and 53% Hispanic, a significant difference based upon the large number of non-white students in the program. Length of stay per student ranged from 1 day to 132 days (non-consecutive), averaging 33 days, approximately equal to the initial recommendation of a 6 week stay. The 33 day figure was considerably lower than the 58 day average of last year. Thus there was improvement in the program at Glenwood this year in terms of number of students served and length of stay, though the racial distribution still warrants closer scrutiny and the number of students served could be greater, and would be if the program was expanded to provide tutoring for students needing help in basic skills.

At Van Sickle, 722 students were served in the Academic Intervention Center, (an average of 13 per day). Racial distribution was 35 percent white, 38 percent non-white, and 28 percent Hispanic compared to a school population of 39 percent white, 33 percent non-white, and 28 percent Hispanic, a non-significant difference. Average length of stay was three days per student with many students only serving for part of the day.

The Putnam AIC program served 299 students (an average of approximately 8 students per day). Racial distribution was 72 percent white, 15 percent non-white, and 14 percent Hispanic compared to a school population of 55 percent white, 25 percent non-white, and 20 percent Hispanic, a significant difference based on a greater number of white students in the program than in the school population. Average length of stay per student was approximately four days.

Objectives of the in-house suspension programs were to decrease out-of-school suspensions and to improve student behavior. At Glenwood the program also hoped to improve self-esteem.

Analysis of suspension data for this year and last year at Glenwood, Van Sickle, and Putnam indicate that only at Putnam was there a decline in the number or rate of suspensions this year (see Table F1). Totally, also, there was an increase rather than a decrease in suspensions, with most of the increase coming at Van Sickle.

Another objective of the in-house suspension programs was to improve student behavior. At Glenwood and Van Sickle, teachers of students who were referred to the In-House Suspension Centers completed a behavior rating form (BRF) at the time of referral and within one month of the termination of counseling or center placement. The elementary form consisted of 36 statements about a student's behavior with 5 possible responses. Maximum score was 180, and the higher the score the mose acceptable the behavior. The secondary form consisted of 27 statements with 5 possible responses and had a score range of 27 to 135. As with the elementary form, the higher the score the more acceptable was the student's behavior. Both forms have reliability coefficients exceeding 0.90.

BRF results for this year and previous years at Glenwood is summarized in Table F2. Behavior change at Glenwood this year was slightly positive, but not significant, though improved over last year. Compared to previous years, the change in behavior this year was below average.

BRF results for the program at Van Sickle over time are presented in Table F3. Behavior change this year was positive and significant. Compared to previous years, however, raw score change in behavior was lower, but significant nevertheless.

At Putnam, a modified behavioral rating form was completed by teachers at the time of referral and approximately one month after students returned to class. Teachers rated students on a five-point scale (Always-Never) on ten different behavioral aspects including tardiness, truancy, disruptive behavior, profanity, and disrespect. Maximum possible score was 50 with a lower score indicating more appropriate behavior. According to results of the behavioral survey, there was a significant overall change in behavior as evidenced by negative change scores (see Table F4). The change this year, however, was less than that of last year.

The percent of students who improved in behavior at the above schools is given in Table F5, with 80 percent being the target figure. Totally, 56 percent of the students improved in behavior with percent change ranging from 73 percent to 50 percent. This percent was lower than the peak percent recorded last year, and was the lowest percentage of improvement in three years (see Table F6).

Another goal of the program at Glenwood was that students would improve in self-image. The Inferred Self-Concept Scale, a scale completed by teachers concerning their observations of the students in their classrooms, was utilized to measure self-concept. The scale consisted of 30 items with 5 possible responses. Score range was 30 to 150, with a higher score indicating better self-concept. This scale had a reliability coefficient of 0.90, and, like the BRF, was administered at the time of referral and within one month after termination of referral.

Pre and post results of the Inferred Self-Concept Scale at Glenwood over time are given in Table F7. According to the results there, self-concept improved at Glenwood this year but not significantly. Additionally, the change in self-concept at Glenwood this year was higher than that of last year, though lower than the results of other years.

The percent of students in In-House Suspension Programs who improved in self-concept over the past six years is given in Table F8 with 80 percent being the target figure. The 80 percent goal was not attained this year as only 40 percent of the students had improved self-concept. Furthermore, the percent this year was the lowest ever.

Classroom teachers were asked to evaluate the success of the in-house suspension programs in attaining each of six objectives using a success rating scale from 1 (Very UNsuccessful) to 7 (Highly Successful). Mean success ratings at the schools ranged from 4.12, at the middle of the scale, to 6.85, at the end of scale (see Table F9). Ratings totally were fair to good, ranging from 4.70 to 6.17. According to teachers, the programs were most successful at decreasing the number of suspensions from school that would have occurred in the absence of the program. Next most successful objective was decreasing the incidence of behavior problems in the classroom. The program at Glenwood seemed to be particularly successful here, according to teachers. Least successful objective, according to teachers, was improving the quality of interactions between students.

Classroom teacher comments were generally positive, though there were some concerns with the lack of completion of assignments. Comments included the following:

Classroom Teacher Comments: In-House Suspension Program

> "This program should be continued in the future."
>
> "Very good discipline alternative"
>
> "The students serviced were able to maintain their class standings more readily than if they had been suspended and outside the rigidly controlled in-house environment. This was important."
>
> "An absolute most needed program in the school."
>
> "Most helpful of all 'extra' programs in the School - I'd have a great deal of trouble without this available for use."
>
> "We just couldn't do without this program.

"It helps in so many ways - ways that aren't always clearly evident on paper."

"I would like to see the continuation of this program. Excellent!"

"It is a shame that this program is being eliminated."

"Highly successful, but has potential to be greater. Need for greater coordination between staff and classroom teacher. Students do not complete work they feel difficult."

"I don't think the in-house was that effective. It appeared as if the students weren't helped with their work. At times certain people were rejected from in-house because the instructor couldn't do anything with them.

"Evaluation instruments are very difficult to read & fill in. No instructions came with them - as for what they would be used."

"AIC effectively discourages some students from breaking class rules and school rules. By keeping them in school, they complete their classwork, have teachers available for questions, and have time to think about why they are being punished.

"If AIC does not encourage the student to avoid future suspensions the first time, it will have no effect on the second or third time either."

"I have seen the same students in AIC with little positive results. The work we give is busy work. The student can't do the work w/o teacher assistance and therefore the work is subpar at best."

"The AIC program is probably better than suspending pupils out of school, but it can't be a cure-all for this school system's more serious shortcomings. Kids have to know we're serious about education.
Suggestions: exam tied to graduation
: no social promotions."

"Many students come back to class and tell teachers how they finished all their work on their first day of in-house, then sat around or read comic books until their time was up."

"Many good students end up in in-house because of crutches and complain about being put in with the trouble-making students."

> "Student not being present in class allows other class members improved atmosphere for learning. However, provides only minimal deterrence of unacceptable behavior."

In summary, the In-House Suspension Programs do appear to have some effect on improving student behavior. They have not, however, lowered the number of suspensions, though perhaps the number of suspensions would be considerably higher without such programs. The programs could benefit, perhaps, from working more to improve the quality of interactions between students, the least successful aspect of the program according to teachers, and by providing more direction and assistance for students completing assignments.

Recommendation

According to classroom teachers, the least successful aspect of the In-House Suspension Programs was improving the quality of interaction between students. In keeping with the overall goals of Chapter 636, improving integration, the programs should place a greater emphasis on improving student peer relationships, utilizing guidance counselors, adjustment counselors, and any other available resources. In addition, every effort needs to be made to insure that the racial distribution of the students served, on a daily basis, reflects the school racial distribution.

TABLE F1

Number and Rate of Suspensions Per Pupil by School

Schools with Chapter 636 In-House Suspension Programs

Two-Year Comparison

	Number		Rate/Pupil*	
School	83-84	84-85	83-84	84-85
Gle	2	4	0.01	0.01
Van	311	381	0.32	0.40
Put	281	246	0.21	0.20
Total	594	631	0.22	0.25

*Based on March 1, 1985 census

TABLE F2

Elementary BRF Scores
Glenwood Behavior Modification Program
Seven-Year Comparison

Year	N	Pre	Pst	Dif	T
1978-79	28	104.5	125.1	+20.6	+8.26*
1979-80	28	97.5	108.0	+10.5	+3.41*
1980-81	15	109.9	124.5	+14.6	+2.94*
1981-82	22	101.0	121.4	+20.4	+7.42*
1982-83	11	108.1	117.3	+ 9.2	+2.66*
1983-84	15	105.9	106.4	+ 0.5	+0.15
1984-85	15	116.1	122.7	+ 6.6	+1.39

*$P < .05$

TABLE F7

Inferred Self-Concept Scores
Glenwood Behavior Modification Program
Six-Year Comparison

Year	N	Pre	Pst	Dif	T
1979-80	8	85.9	90.1	+ 4.2	+1.46
1980-81	15	97.9	108.6	+10.7	+2.32*
1981-82	22	90.7	107.1	+16.4	+8.40*
1982-83	11	98.3	108.3	+10.0	+2.43*
1983-84	15	90.9	92.4	+ 1.5	+0.56
1984-85	15	102.4	105.4	+ 3.0	+1.04

*$P < .05$

TABLE F3

Secondary BRF Scores

Van Sickle In-House Suspension Program

Six-Year Comparison

		Mean Score			
Year	N	Pre	Pst	Dif	T
1979-80	56	80.4	86.2	+ 5.8	+ 3.63*
1980-81	85	82.1	90.8	+ 8.7	+ 6.67*
1981-82	152	82.5	94.9	+12.4	+11.98*
1982-83	131	89.3	98.7	+11.4	+11.56*
1983-84	155	96.6	101.4	+ 4.8	+ 6.33*
1984-85	135	98.0	101.1	+ 3.1	+ 3.06*

*P < .01

TABLE F4

Putnam Behavior Rating Form Results

AIC Program

Four-Year Comparison

		Mean Score			
Year	N	Pre	Pst	Dif	T
1981-82	200	14.81	12.77	-2.04	-3.21*
1982-83	146	15.49	14.84	-0.65	-2.08
1983-84	45	16.33	13.11	-3.22	-4.06*
1984-85	119	13.76	12.87	-0.89	-2.83*

*P < .01

TABLE F5

Number and Percent of Students

Who Improved in Behavior

Chapter 636 In-House Suspension Programs

School	Total N	Improved N	Improved %
Gle	15	11	73%
Van	135	81	60%
Put	119	59	50%
TOTAL	269	151	56%

TABLE F6

Number and Percent of Students

Who Improved in Behavior

Chapter 636 In-House Suspension Programs

Seven-Year Comparison

Year	Total N	Improved N	Improved %
1978-79	123	81	66%
1979-80	150	85	57%
1980-81	465	232	50%
1981-82	464	295	64%
1982-83	382	221	58%
1983-84	215	150	70%
1984-85	269	151	56%

TABLE F8

Number and Percent of Students Who
Improved in Self-Concept
Chapter 636 Behavior Modification Programs
Seven-Year Comparison

Year	N	Number Improved	Percent Improved
1978-79	19	13	68%
1979-80	39	23	59%
1980-81	34	23	68%
1981-82	22	21	95%
1982-83	11	8	73%
1983-84	15	11	57%
1984-85	15	6	40%

TABLE F9

Classroom Teacher Perceptions of Chapter 636 In-House Suspension Programs

Success Rating of Objectives

Seven-Point Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

		Mean Success Rating			
	N=*	13	22	29	64
	Objective	Gle	Van	Put	Total
1.	Decreasing the number of out-of-school suspensions which would otherwise have occurred	6.85	5.86	6.10	6.17
2.	Decreasing the incidence of behavior problems in the classroom	6.85	4.77	4.89	5.25
3.	Improving student attitutde toward school	6.46	4.41	4.52	4.88
4.	Improving the rate of student attendance at school	5.77	4.77	5.17	5.16
5.	Improving the work/study habits of students in their classes	6.75	4.41	4.66	4.97
6.	Improving the quality of interactions between students	6.08	4.64	4.12	4.70

*Not all teachers responded to each item

G. Program Evaluation: Magnet School Programs

During the 1983-84 school year, nine elementary schools and two junior high schools received additional Section VIII monies through Chapter 636 for programs to attract out-of-district students to the schools on a voluntary basis in order to improve the racial mix of students at the magnet schools. Sixteen Acres, which replaced White Street as the school attracting Hispanic students out of District VI, was the newest magnet school in Springfield.

In the 1984-85 school year, marking almost a decade of magnet school programs in Springfield, more students were voluntarily enrolled in magnet school programs than in any previous year (see Graph G1). As of mid-year, 1064 students voluntarily participated in full-time magnet school programs, an increase of 100 over last year (see Table G1). Some 893 students were enrolled on the junior high school level. the highest ever. Four magnet schools enrolled more students this year than last year and recorded their highest enrollment ever. Greatest percent of increase came at Brightwood (127%) followed by Chestnut (126%). Five schools had decreased enrollment compared to last year, although three of the schools (Armory, Kensington, and Sumner) are at capacity while White Street is phasing out as a magnet. Greatest percent of decrease (with the exception of White) came at New North (-9%), continuing a downward trend which began in 1981. While enrollment at New North has understandably been affected by increased enrollment at Armory and Warner and by the decline in the available selection pool at the grade 5-6 level, there is still a demonstrated need for action to increase magnet student enrollment at New North. In January this evaluator recommended either a programmatic change (i.e. linking Brightwood, Lincoln, New North, and Chestnut in a comprehensive science program), and/or a more intensive recruitment campaign (i.e. field trips by fourth grade students to New North or performances by New North at selected K-4 buildings), and/or additional enticements (i.e. an after-school enrichment or activity program for magnet and neighborhood students). As a result of more vigorous recruitment this past Spring and the projected implementation of a comprehensive science program at all District VI magnet schools, the projected enrollment at New North, other District VI magnet schools, and magnet schools in general for next year show dramatic increases. As of this writing, approximately 1500 students will be voluntarily enrolled in magnet school programs in Springfield (for 1985-86), about a 40% increase over the magnet student enrollment last year.

Racial distribution of voluntarily enrolled magnet students this year was 40% white, 31% non-white, and 20% Hispanic, closely matching the 45% white, 29% non-white, 25% Hispanic school population (see Table G2). Highest percentage of white enrolled magnet students was at Chestnut (90%) while the highest percentage of non-white enrolled magnet students was at Kensington (61%). Three schools (Sixteen Acres, White Street, and Van Sickle) had 100% Hispanic magnet enrollment by design. The increased popularity of the Hispanic magnet schools in Springfield has resulted in the highest ever number of Hispanics participating in the magnet program (see Table G3). The highest number of white students ever (519) were also enrolled in the magnet program this year, reflecting the increased success of recruitment at Brightwood, Lincoln, and Chestnut. Participation of non-white students, however, reached its lowest level in five years (335), a direct reflection, perhaps, of the lack of available space at Sumner Avenue School, the school with the largest non-white magnet student enrollment, to enroll significant numbers of non-white magnet applicants.

The 1064 enrolled magnet students came from every elementary and junior high school in Springfield (see Table G4). The number of students from regularly assigned schools varied considerably, ranging from 143 from Ells and 105 from Brookings to only 3 from Harris and 1 from Sumner. Schools from which the magnet schools had little success in attracting students, as indicated by fewer than 10 enrolled magnet students, include Sumner, Harris, Bowles, Kensington, Howard, Liberty, Sixteen Acres, DeBerry, Glenwood and Beal.

The number of new magnet school applicants (as of the January, 1985 mid-year census) by school is given in Table B5. Total applications recorded were 1136 with over 1000 on the elementary level. Greatest number of applications were for New North (180) followed by Sumner (175). Smallest number of applications were for Chestnut (51) which was initially limited to recruiting only white students. Note also that a disproportionate percentage of non-white applications were received (36%) compared to their incidence in the school population (29%), evidence that the magnet program is extremely popular among non-white parents.

Of the new magnet school applicants, some 521 (46%) were actually enrolled in magnet schools (see Table G6). New North and Sixteen Acres enrolled the greatest number of *new* students while Sumner (limited by space to placement of only siblings of Sumner enrolled magnet students) enrolled the lowest number. Totally, magnet programs enrolled 260 new white magnet students, 138 new non-white magnet students, and 123 new Hispanic magnet students. It is important to note that the 260 newly enrolled white magnet students represented 59% of the white students who applied, but the 138 newly enrolled non-white magnet students represent only 34% of the non-white students that applied. In the opinion of this evaluator, we are not adequately meeting the magnet program needs of our non-white applicants (whose placement could indeed facilitate greater integration). We need to conscientiously explore new ways to accommodate increased number of non-white magnet students in exisiting or new magnet school programs. Options to consider include opening an additional magnet school to attract only non-white students, closing an existing magnet school to be replaced with another magnet school which could attract larger number of non-white students only, or opening up additional space at one or more magnet schools by moving some non-mandated programs.

According to Table G7, some 481 of the new applicants (representing 42% of all new applicants) were placed on a wait/hold list either because of lack of space at the magnet school or because of racial balance at either the magnet school or the sending school. Largest waiting list was at Sumner (146) while at Sixteen Acres only four students, all applying for kindergarten placement, were placed on a waiting list. A large number of non-white students were unable to be placed at Lincoln due to racial balance at that school. Totally, a disproportionate number of non-white students (49% of those on the waiting list) could not be placed in magnet schools (see Graph G2).

Only 134 of the 1136 new magnet school applicants, representing 12% of the new applicants, withdrew from participation in the magnet school program (see Table G8). The overwhelming majority of these withdrawals came prior to actual enrollment in magnet schools and/or because of a move out of the city. The greatest number of withdrawals came from Sixteen Acres as a number of parents apparently applied for magnet placement without fully understanding the nature of the program. Fewest number of withdrawals came at Armory and Kensington.

The number of magnet school applicants over time for each magnet school is presented in Table G9. Totally, the number of magnet school applicants this year was the highest ever and the first year that over 1000 applications were received, though applications for next year are already running ahead of last year. The number of newly enrolled magnet students (521) was the highest ever, though only 46% of the new applicants were enrolled, the second lowest percentage ever. The number of withdrawals (134) was also the highest ever, though the percent of new applicants withdrawing (12%) was only slightly above the 11% rate of the previous three years and is perhaps a reflection of better record keeping than anything else. The number of students on a wait/hold status, 481, was higher than in any previous year except the initial year of the magnet program. Examining individual schools, this year there was a record number of applicants for Armory, Brightwood, Lincoln, and Chestnut. New North, however, recorded the smallest number of applicants ever. The percentage of applicants that were enrolled was highest at Chestnut (73%) and New North (67%) and lowest at Kensington (32%) and Sumner (11%). At Sumner, the percentage enrolled was the lowest ever as spaces were available only for siblings of enrolled magnet students. The percentage of applicants on a wait/hold status was highest at Sumner (83%), Lincoln (65%), and Kensington (61%). The highest rate of withdrawals was at Sixteen Acres (25%) and Van Sickle (26%), while the lowest rate was at Armory, Kensington, and Sumner, each with 7%.

The acceptance of students into the magnet schools has had a positive effect on the racial distribution of students in magnet schools. In Table G10, the actual racial distribution of students in magnet schools, according to the October 1 racial census (which includes enrolled magnet students) is compared to the hypothetical racial distribution if the magnet program was not in existence. For example, the actual racial distribution at Armory was 44% white, 23% non-white, and 33% Hispanic but the hypothetical racial distribution if the magnet program did not exist would have been 41% white, 25% non-white, and 34% Hispanic. Therefore, as a result of the magnet school program, the racial distribution at Armory has improved to better reflect the 44% white, 56% minority city-wide racial distribution.

The greatest change in student racial distribution resulting from the magnet program this year came at Brightwood and New North as the Hispanic percent at both schools was 17 points lower this year than it would have been in the absence of the magnet program. Presence of a large number of non-white magnet students at Kensington, Sumner, and Warner helped to increase the non-white student percent of population by 10 points, 7 points, and 7 points respectively while the new magnet program at Sixteen Acres led to an increase of 13 points in the Hispanic percent of population. On the junior high school level, the actual white percent of population at Chestnut was 8 points higher this year compared to only a 1 point difference initially, while the Hispanic percent at Van Sickle was 7 points higher for the second year in a row. Over time, the largest average change in racial distribution resulting from the magnet program has come at New North with an average decrease of 17 points in the Hispanic percent of population.

The impact of the magnet program on the racial distribution of the non-magnet schools is considerably less than that at the magnet schools. As seen in Table G11, the largest percent changes of all the elementary and the junior high schools are found at the magnet schools. Largest change at non-magnet schools was at Ells and Freedman where the white percent of population was 5 points lower than would have been the case in the absence of the magnet program. Magnet student placement had little or no effect on white student percentage at several schools with large white enrollments (i.e. Beal, Harris, Indian Orchard, Lynch, Memorial, Washington, Forest Park, and Kiley). These schools present a recruitment challenge and still maintain a large pool of potential white magnet students for District VI magnet schools.

Concerning recruitment, the magnet school program continues to attract large numbers of students from all areas of the city, though the magnet schools are more successful at attracting students from some schools than others. In Table G12, the total number of applications (continuing magnet students + newly enrolled magnet students + students on a wait/hold list + withdrawals) and the rate of applications (total applications divided by the hypothetical school population if the magnet program did not exist) at each elementary school and junior high school is given. Totally, the rate of applications per student was 0.10 meaning that 10% of the elementary and junior high school students showed an interest in magnet school placement this year compared to a rate of 0.09 (9%) last year. The rate was higher on the elementary level (.12) than on the junior high school level (.05). Elementary non-white students had the highest rate of applications with 18% applying compared to 12% of white elementary students and 9% of Hispanic elementary school students. By school, the rate of applications on the elementary level ranged from a high of .48 at Ells (175 applicants) to a low of .01 at Sumner (4 applicants). Highest rate of applications on the junior high school level came at Chestnut with .15 (142 applicants) while the lowest came at Kiley with .01 (16 applicants).

Several schools listed in Table G12 have populations of more than 55% white and rates of applications per white student lower than the city-wide average. These schools, followed by their rate of applications per white student, include Beal (.07), Harris (.03), Indian Orchard (.08), Kensington (.03), Lynch (.06), Memorial (.08), Sixteen Acres (.02), Sumner (.01), Forest Park (.07), and Kiley (.02). The white students at these schools, in the opinion of this evaluator, represent the greatest potential growth area for District VI magnet schools and should be vigorously recruited. Additionally, as 3 of these schools are magnet schools which attract large numbers of minority students, attracting students from these schools could open up additional spaces for non-white magnet students, a group which is considerably over-represented on the magnet student waiting list.

In summary, the magnet school program, in its ninth year of operation, is still very much alive in Springfield. Interest in our magnet school programs continues to grow, although even greater interest in our District VI magnet schools is desired. Continued vigorous recruitment, new program offerings, and additional enticements are still warranted in order to attempt to attract additional non-Hispanic students to these schools. Certain schools which have large white student populations but a low rate of magnet school applications represent a significant resource of potential white magnet students. On the other hand, interest of non-white parents in our magnet schools remains far greater than our ability to place non-white students in magnet school programs. Efforts need to be made to open up additional magnet school spaces for non-white students as placement of these students could significantly enhance integration.

Although each magnet school had different Chapter 636 programs with individual goals and objectives, each school had a magnet objective to provide a strong basic skills program. Results of the Comprehensive Test of Basic Skills (CTBS) were initially used to document the effectiveness of magnet schools in providing strong basic skills programs. Beginning with the 1983-84 school year, however, a new test, the Metropolitan Achievement Test (MAT), was initiated.

The MAT in Reading was given to all fourth, sixth, and seventh grade students at magnet schools in the Fall of 1984 and Spring of 1985, while the MAT in math was given to these same students in the Spring of 1984 and spring of 1985. The MAT in both reading and math was also administered to fifth grade students in magnet schools in the Spring of 1984 and Spring of 1985. Fall-Spring testing periods were six school months apart on the elementary level and seven months apart at the secondary level while Spring-Spring testing periods were 10 school months apart. Sixth grade students participated in the pilot normalization of a new MAT6 in the Spring of 1985, hence pre-post test results for sixth grade students are unavailable at this time.

In reading, as shown in Table G13, students at every grade level tested (4, 5, and 7) had mean grade equivalent gain greater than expected gain, averaging 18 months at grade 4 (with 6 expected), 13 months at grade 5 (with 10 expected), and 15 months at grade 7 (with 7 expected). Student progress at Lincoln and Sixteen Acres was exceptional, 20 months and 23 months gain respectively, and NCE gain at these two schools was greater than 7.0, an indication of very significant growth. While no school attained the optimisitc goal of 80% of students improving at a month-for-month basis, 75% of the students at Sixteen Acres and 73% of those at Lincoln showed month-for-month or greater grade equivalent gain. Totally, 66% of the students in grade 4, 47% in grade 5, and 57% in grade 7 made month-for-month or better grade equivalent gains in reading. Unquestionably, in the area of reading, the magnet schools have evidence of a strong basic skills program.

Mathematics achievement test results, as seen in Table G14, were less positive than those in reading. Totally, average grade equivalent gain was 7 months with 10 months expected (spring-spring testing dates). Only at Kensington, Lincoln, Sumner, and Warner was progress greater than expected. Percentile rank change and NCE change was negative in many cases, and less than half the students, totally, showed month-for-month progress. Compared to previous years, the ratio of obtained to expected grade equivalent gain was the highest ever in reading but the lowest ever in math (see Table G15). Mean NCE change matched last year's high in reading, while NCE change in math was the lowest ever (see Table G16). Finally, percent of students attaining month-for-month gain was lower than last year in reading, and the lowest ever in math (see Table G17).

The lower success levels in math at the magnet schools this year cannot be easily explained, as there was, to the knowledge of this evaluator, no substantial changes in math instruction this past year. However, this year was the first year of systemwide testing with the MAT and the first year of Spring-Spring testing with different MAT testing levels. Possibly the MAT is not as sensitive to the math curriculum in Springfield or perhaps using different level of the MAT for pre and post testing provides a less valid measure of progress than using the same level and form for pre and post (as has been done in the past). In any cases, principals and teachers in the magnet schools are advised to carefully scrutinize the results of their MAT testing in math to determine if any changes in their math program are warranted.

Always of interest to parents is how well do the voluntarily enrolled magnet students achieve in the basic skill areas of reading and math. In Table G18, achievement test data in both reading and math for both the magnet students and the regularly assigned students in magnet schools is presented. In reading, at grade 4, 5, and 7, magnet students had grade equivalent gains greater than expected (as did regularly assigned students.) Progress of grade 4 magnet students in reading was exceptionally high: 22 months grade equivalent gain, 15 point percentile rank gain, NCE gain of 7.4, and 75% of students showing month-for-month gain. Progress in math was not as impressive, though magnet students at both the fourth grade level and seventh grade level had grade equivalent gain surpassing expectations. Only fifth grade magnet students, in math, had less than satisfactory progress. Voluntarily enrolled magnet students generally appear to be successful in the basic skill areas in our magnet schools.

The magnet schools in Springfield, in addition to providing a strong basic skills program, were also expected to provide a good environment for integration to occur. In order to determine the effects of magnet programs on integration, a locally developed sociogram was administered in October and in May to some third, all fourth, and some fifth and sixth grade students in all elementary schools (magnet as well as non-magnet schools). The sociogram asked the students to select one student from the class in response to each of seven questions:

1. Which classmate would you choose to work on a school project with?
2. Whom would you choose to eat lunch with?
3. Which classmate would you pair up with to go on a field trip?
4. Which student do you most like to play games with?
5. What student would you most like to have sit near you in school?
6. Who is your newest friend in the classroom?
7. Whom would you choose to come to your home for a party?

Following the administration of the instrument, the number and rate of cross-racial selections in each class were examined by race and sex. A report on the extent of integration in each of the classrooms surveyed was given to each principal to share with the affected staff. The report included data on cross-racial selections of each sex and each race subgroup and also listed isolates and most frequently selected students and cross-racial selection rates by question.

Results of sociogram testing at the magnet schools this year compared to seven previous years and to non-magnet schools is given in Table G19. As presented there, the cross-racial selection rate at the magnet schools has risen consistently (with the exception of 1981-82), as has the rate for non-magnet schools. In five of the past seven years, the cross-racial selection rate at the magnet schools has been higher than that at the non-magnet schools (while the rates were equal in the other two years). This year the magnet schools, totally, had the highest CRS rate ever, and five magnet schools had improved CRS rates compared to last year. Further, the CRS rate this year at the magnet schools was slightly higher than that at the non-magnet schools, an indication that magnet schools continue to provide a good environment for integration to occur.

In order to determine parent perceptions of the magnet school program, a newly designed questionnaire was distributed to parents of all voluntarily enrolled magnet students in May. Totally, 362 surveys were received, representing about 34 percent of all magnet parents.

One part of the survey asked parents to indicate the perceived level of success of the magnet school in accomplishing six general objectives, using a 7 point rating scale from 1 (Very UNsuccessful) to 7 (Highly Successful). Parents were also asked to rate the success of the magnet school overall, were asked a few questions regarding their choice of magnet programs, and were asked to write any comments they considered appropriate.

Results of the first part of the parent survey, shown in Table G20, were very positive, as the mean success rating on all questions, totally, exceed 5.00. Most successful objective, according to magnet parents, was providing an enjoyable learning experience for students followed closely by providing a strong program in the basic skill areas. In particular, parents at White Street and Lincoln were very satisfied with the level of enjoyment and the strength of the basic skills program. Least successful objective was providing opportunities for parents to become involved in school activities where two schools had success ratings of about 4, the mid-point of the rating scale continuum. Clearly at these two magnet schools, and at magnet schools in general (with the possible exception of White Street, Sixteen Acres, and Sumner), more needs to be done to provide parents with opportunities to become involved in school activities.

Examining the success ratings by school, at Armory, the most successful objective was the quality of the program while least successful was parent input; at Brightwood, most successful was strong basic skills program, least successful was parent involvement; at Kensington, most successful was strong basic skills, least successful was encouraging cross-racial friendships; at Lincoln, most successful was strong basic skills, least successful was parent involvement; at New North, most successful was providing enrichment, least successful was parent involvement; at Sixteen Acres, most successful were encouraging cross-racial friendships and parent involvement, least successful was strong basic skills program; at Sumner most successful was parent involvement, least successful was providing enrichment; at Warner most successful was enjoyable experience, least successful was encouraging cross-racial friendships; at White most successful were encouraging cross-racial friendships and providing an enjoyable experience, least successful was providing enrichment; at Chestnut most successful was providing enrichment, least successful was parent involvement; and at Van Sickle most successful was encouraging cross-racial friendships, least successful was providing enrichment. Thus each magnet has its own individual strengths and weaknesses, in the eyes of parents. By analyzing parent responses and taking action to strengthen the areas where parents perceived some weaknesses, the magnet schools can do nothing but improve their standing with parents.

Magnet parent overall success ratings of the magnet schools, as given in G21, were high, averaging better than 6 on a 7 point scale. The Hispanic magnet schools (Sixteen Acres and White Street), had particularly high ratings. Only two schools had average ratings below 6. Clearly, parents of magnet students are pleased with their youngsters' experiences in magnet schools.

Comments of magnet parents on the magnet parent survey support the findings above. A sampling of magnet parent comments includes the following:

Typical Magnet Parent Comments

> "Very good program. We are very pleased with all aspects of the school."

"I have been very pleased with my daughter's year at _________. Her interaction with the other students in her class have been excellent experiences. However, attention should be given to the small no. of minority students in the gifted class."

"Super school !"

"I have a real concern that the children do not really have a phys. ed. program. Children their age need a chance to get rid of their energy constructively and breathe fresh air. They need time for play & exercise."

"I think the school is doing a great job. They're all very nice & willing to help if there is a problem. And they inform you as to the problem & the course of action they want to do. They make you feel involved in your child's schooling."

"My child made steady progress since being transferred to a magnet school. He enjoys going to school and we are overwhelmed at the rate of progress he has made. Whatever the magnet system has is working. I only wish more children could take advantage of it as there is a lot that has to be changed in the regular system."

"I have noticed a change from the beginning when I put my son in this school, especially his attitude about school. I don't have to make him get up in the morning. He's ready to go everyday. He talks constantly about what he's learning each day but most of all he's happy in the school."

"My overall feeling is that my child's experience is a good one. However, I would like more involvement and be able to suggest programs from which the school may benefit."

"Please keep up the good work. My son has had very good teachers each year. They care about the children and encourage them to give their best."

"I would like to commend the principal and teachers for their efforts. I've known several elementary schools but none where the emphasis is so much on knowing and helping the students. The concern really shows and the children feel it also. My son has also been made more appreciative of music with the special music program at this school - it is great!! The teacher and aide really work hard!"

"I think the staff is particularly friendly and supportive of the students. This was particularly appreciated since my daughter tends to be quiet and shy. The teachers have allowed her to regain her original enthusiasm for school and learning there. I'm very pleased and would recommend _________ School very highly. Thank you."

"On the whole, this magnet school has been a very positive experience for my son. His teachers have built his self confidence, encouraged him to be a creative writer and helped him to enjoy school for the first time! Keep it up!!"

"My major concern is if students who get so involved in all extra activities (eg. music, plays, etc.) are getting all the basic academics of skills they will need. Also sometimes they are really rushed from one thing to another. I do know some children thrive on those types of schedules. I think my child does.

"Overall I am very thankful that we made the decision to send our son to this school. I don't think there is a finer elementary school in the state."

"I have been extremely impressed by and thankful for the caring, interest and ability of all my son's teachers. They have encouraged and provided numerous opportunities. His eagerness and joy to go to school and learn independently are credited to their efforts."

"This is the second child of ours to attend this school. Our first daughter attended 4 years ago. I'm very pleased that the standards & quality of education has remained as its high level."

"I think this year has enriched my daughter's life. Academically as well as socially. She thoroughly enjoys attending school."

"Keep up the good work!! I only hope my son will be able to return next year niw that we have moved. I like the school so much, I'd be willing to transport him back and forth myself."

"We hope the magnet programs will continue to give good basic skill programs & also enrichment programs. We are very pleased on the whole with the total program."

> "I am very pleased with my child's education this year. She is enjoying herself, and doesn't mind going to school. Teachers are great! Thank you."

> "I still prefer the magnet schools to regular schools. What about more magnet junior highs?"

> "The lack of a late bus makes intramural and other after school activities very difficult for magnet students and their parents."

> "I would like to see a better system for the parent and teacher to talk about the student and more progress reports done."

> "I feel that there should be more communication both written and verbal concerning extra school programs.
>
> Bus transportation for magnet students who stay after for extra help."

Magnet parents were asked what were their primary reasons for selecting the magnet schools attended by their children). The results, as indicated in Table G22, were many and varied. In some cases, special programs in the schools attracted parents (i.e. math/computer program at Armory, all-day kindergarten at Brightwood, enrichment opportunities at New North). In other cases, the reputation of the school according to friends or relatives, the fact that a sibling attended the school, or high academic standards were seen as the primary attractions.

Parents were also asked this year, for the second time, what they felt should be the primary emphasis of magnet schools: academic standards, developing individual creativity, or developing character and values. Overwhelmingly, as seen in Table G23, and Graph G3, parents selected academic standards (62 percent), followed by character (19 percent), and creativity (19 percent). At each school, with the exception of White Street, more parents selected academic standards than either creativity or character (see Graph G4). Creativity ranked second at all schools except Sixteen Acres where developing character and values ranked second. This supports research which has indicated that, among Hispanic parents, ethical education is a very important program emphasis.

Finally, parents were asked which additional programs, if any, they would like to see made available. High on the parent shopping list of programs were programs involving computers and physical education programs. Magnet Schools might wish to consider such new programs or expansion of existing programs should additional resources become available (see Table G26).

In order to determine student perceptions of magnet schools, questionnaires were distributed to all students in grades 4-6 in the elementary magnet schools and to magnet students in the two magnet junior high schools. Surveys were returned from all schools.

The student survey consisted of seven statements about school to which students indicated their level of agreement. Students were also asked to rate their school overall on a five point scale from 5: (Very Good) to 1: (Very Poor) and to list what they liked most and least about school.

Student perceptions of the magnet schools this year were certainly positive as better than 80 percent of the students, totally, agreed with all statements pertaining to their school (see Table G27). Percent of agreement was highest on questions 2 and 4, the "learning a lot" and "making new friends" questions and was lowest on question 3 concerning how friendly the school was.

One area of concern based on the results above is question 3. Less than 80 percent of the students at Armory and Sumner felt that their school was a friendly school. Perhaps a greater effort is called for at these schools in particular to encourage student friendships (i.e. between neighborhood and magnet school students) or to provide more frequent opportunities for students to socialize in a less structured learning environment (i.e. to provide more team or group learning activities or mini-course experiences).

Compared to last year, student perceptions of the magnet schools this year were improved (see Table G28). On questions 1 (enjoyment), 2 (learning), 3 (friendliness), 4 (new friends), 5 (culture) and 7 (happiness), student perceptions were more favorable this year and, in fact, were at or near the highest levels ever. Overall rating by students this year was also slightly higher than that of last year (see Table G29) as all schools had mean success ratings of 4 (good) or better.

Students were also asked what they liked least and most about their schools. Their responses, shown in Table G30, reveal that teachers, math and computers were among the most liked aspects of school, while "nothing", reading, and social studies were among the least liked.

Recommendations

1. A decline in magnet student enrollment at New North over the past few years appears to have been reversed this year, the result, perhaps, of a more intensive recruitment (i.e. bringing fourth grade students to New North to view a play and to tour the facility), and a projected better linkage with Brightwood, Lincoln, and Chestnut (i.e. Science and computer programs). There appears to be a continuing need for aggressive recruitment and innovative or distinctive programs in order to continue to increase the participation of non-Hispanic students in District VI magnet schools.
2. Enrollment of non-white students in magnet schools declined last year to the lowest level in five years, although applications from non-white students have increased. Additionally, 36% of the students on the waiting list were non-white though only 29% of the students in Springfield are non-white, and only 34% of the non-white applicants were enrolled compared to 59% of white students. We need to conscientiously explore new ways to accommodate increased number of non-white magnet students in existing magnet school programs or perhaps to consider the creation of a new magnet school to attract non-white students exclusively.
3. Mathematics achievement test results for magnet schools this year were

not as successful as in prior years, perhaps the result of testing with the MAT given from spring to spring at different test levels, or perhaps the result of less sensitivity of the MAT to the Springfield math curriculum. In any case, principals and teachers in magnet schools should carefully scrutinize the results of the MAT testing to determine if any changes in their math programs are warranted, or if, perhaps, the evaluative use of the Mathematics Assessment and Prescriptive Program needs to be explored.

4. Least successful objective of the magnet schools, according to parents, was providing opportunities for parents to become involved in school activities. Magnet schools need to seriously explore creative ways to involve more magnet parents in their schools.
5. According to almost two-thirds of magnet parents, primary emphasis of magnet schools should be academic standards. Additionally, the most important factors in parent selection of magnet school were a strong, basic skills program and enrichment opportunities. In order to continue to attract large numbers of prospective magnet students, magnet schools must place primary emphasis on offering (and publicizing) a strong program in basic skills and a program that provides enrichment opportunities.

Graph G1

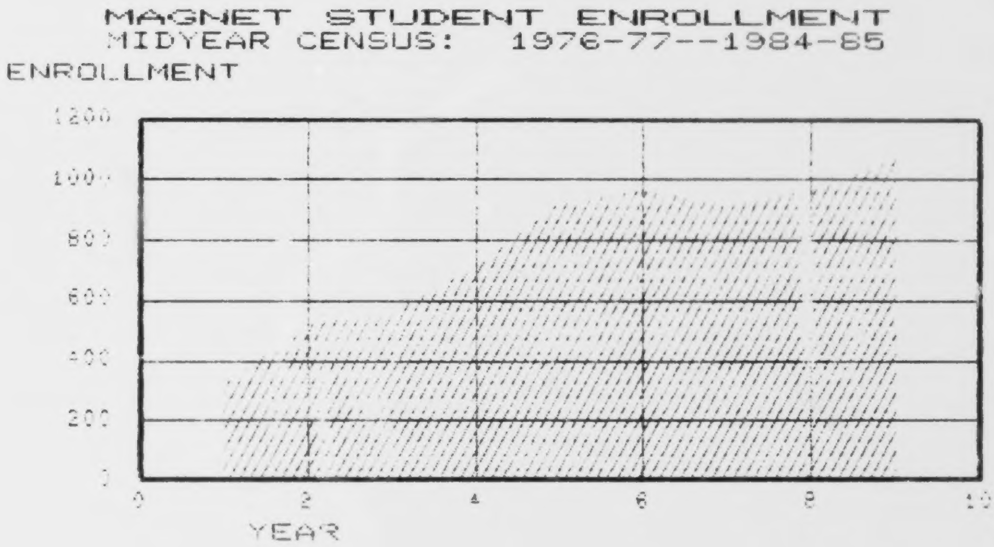

MAGNET STUDENT ENROLLMENT
MIDYEAR CENSUS: 1976-77--1984-85
ENROLLMENT
1200
1000
800
600
400
200
0
0
2
4
6
8
10
YEAR

TABLE G1

Mid-Year Census

Voluntarily Enrolled Magnet Students by School

Ten-Year Comparison

School	1-77	1-78	1-79	1-80	1-81	1-82	1-83	1-84	1-85	8-85***
Arm	---	44	59	50	65	83	93	109	106	158
Bea*	47	57	38	28	16	8	2	---	---	---
Bri	36	29	36	35	51	38	29	33	75	134
Kns	---	---	---	45	69	94	97	84	81	103
Lin	30	29	34	41	51	32	41	39	53	89
New	156	260	293	374	452	410	317	285	258	369
Six	---	---	---	---	---	---	---	---	70	117
Sum	---	35	44	76	87	105	104	85	79	112
War	47	64	51	66	96	116	136	150	151	179
Whi** (Ell)	---	---	---	---	36	33	25	36	20	14
Che	---	---	---	---	---	---	7	39	88	154
Ken*	---	---	---	---	---	41	28	21	---	---
Van	---	---	---	---	---	---	38	83	83	103
Ele Tot	316	618	555	715	923	918	844	821	893	1275
JHS Tot	---	---	---	---	---	41	73	143	171	257
TOTAL	316	518	555	715	923	959	917	964	1064	1532

*Phased out as a magnet school

**No longer recruiting magnet students

***Enrolled for 1985-86 as of 8-28-85

TABLE G2

TOTAL MAGNET SCHOOL STUDENT ENROLLMENT BY SCHOOL, RACE 1984-85

SCHOOL	WHITE		NON-WHITE		HISPANIC		TOTAL
	N	(%)	N	(%)	N	(%)	
ARM	64	(60%)	25	(24%)	17	(16%)	106
BRI	57	(76%)	18	(24%)	0	(0%)	75
KNS	16	(20%)	61	(75%)	4	(5%)	81
LIN	38	(72%)	15	(28%)	0	(0%)	53
NEW	168	(65%)	90	(35%)	0	(0%)	258
SIX	0	(0%)	0	(0%)	70	(100%)	70
SUM	35	(44%)	42	(53%)	2	(3%)	79
WAR	61	(40%)	76	(50%)	14	(9%)	151
WHI	0	(0%)	0	(0%)	20	(100%)	20
CHE	80	(91%)	8	(9%)	0	(0%)	88
VAN	0	(0%)	0	(0%)	83	(100%)	83
ELE	439	(49%)	327	(37%)	127	(14%)	893
JHS	80	(47%)	8	(5%)	83	(49%)	171
TOT	519	(49%)	335	(31%)	210	(20%)	1064

TABLE G3

Racial Distribution of Voluntarily Enrolled
Magnet Students
Nine-Year Comparison

Race		1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85
White:	N	216	349	359	418	499	471	433	453	519
	%	68%	67%	65%	58%	54%	49%	47%	47%	49%
Non-White:	N	98	163	186	288	362	372	355	336	335
	%	31%	31%	34%	40%	39%	39%	39%	35%	31%
Hispanic:	N	2	6	10	9	62	116	129	175	210
	%	1%	1%	2%	1%	7%	12%	14%	18%	20%

TABLE G4

MAGNET SCHOOL STUDENTS BY RACE AND REGULARLY ASSIGNED SCHOOL

1984-85

	ARM			BRI			KNS			LIN			NEW			SUM			WAR			WHI/SIX			CHE			VAN			TOTAL			
REG	W	B	H	W	B	H	W	B	H	W	B	H	W	B	H	W	B	H	W	B	H	W	B	H	W	B	H	W	B	H	W	B	H	TOT
ARM	0	0	0	1	0	0	0	0	0	1	0	0	18	11	0	0	0	0	1	9	0	0	0	0	0	0	0	0	0	0	21	20	0	41
BAL	0	0	0	9	0	0	0	4	0	5	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	7	0	23
BEA	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7	2	0	9
BOW	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	4
BRI	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	0	0	0	0	0	0	0	1	44	45
BRO	20	6	9	0	0	0	0	1	0	0	0	0	31	18	0	0	0	0	5	11	4	0	0	0	0	0	0	0	0	0	56	36	13	105
BRU	0	0	0	3	2	0	0	8	0	0	2	0	0	0	0	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	4	19	0	23
DEB	0	0	0	2	1	0	1	1	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	3	0	8
DOR	0	0	0	6	0	0	2	2	1	3	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	11	4	1	16
ELI	4	7	2	1	1	0	0	2	0	0	0	0	23	23	0	1	0	0	40	34	5	0	0	0	0	0	0	0	0	0	69	67	7	143
FRE	6	2	0	1	0	0	0	0	0	0	0	0	40	10	0	0	0	0	9	3	1	0	0	0	0	0	0	0	0	0	56	15	1	72
GLE	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	0	8
GLI	9	4	0	1	0	0	0	0	0	0	0	0	18	17	0	0	0	0	4	10	2	0	0	0	0	0	0	0	0	0	32	31	2	65
HAR	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3
HOM	0	0	0	4	4	0	0	10	1	0	0	0	0	0	0	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	8	16	2	26
HOW	0	0	0	0	1	0	0	3	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7
IOE	0	0	0	4	0	0	2	8	1	9	2	0	0	0	0	1	7	1	0	0	0	0	0	0	0	0	0	0	0	0	16	17	2	35
KNS	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4
LIB	0	0	0	1	0	0	0	2	0	1	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	0	7
LIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46	0	0	0	0	0	0	0	0	46	46
LYN	0	0	0	8	4	0	2	3	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	8	0	19
MEM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	11
NEW	5	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	5	6	8	19
POT	0	0	0	5	1	0	0	6	0	4	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	9	13	0	22
SIX	0	0	0	1	0	0	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1	0	6
SUM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
TAL	0	0	0	0	1	0	0	3	1	1	4	0	0	0	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	4	13	1	18
WAR	4	1	0	1	0	0	0	0	0	0	0	0	11	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5	0	21
WAS	16	3	0	2	0	0	0	0	0	0	0	0	27	7	0	1	0	0	2	5	0	0	0	0	0	0	0	0	0	0	48	15	0	63
WHI	0	0	0	2	2	0	5	2	0	3	0	0	0	0	0	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	16	7	0	23
CHE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	83	0	0	83	83
DUG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	2	0	0	0	0	10	2	0	12
POR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	3	0	0	0	0	31	3	0	34
KEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	0	14	1	0	15
KIL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	13	0	0	13
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	2	0	0	0	0	12	2	0	14
TOT	64	25	17	57	18	0	16	61	4	38	15	0	168	90	0	35	42	2	61	76	14	0	0	90	80	8	0	0	0	83	519	335	210	1064

TABLE G5

NEW MAGNET SCHOOL APPLICANTS BY SCHOOL, RACE 1984-85

SCHOOL	WHITE		NON-WHITE		HISPANIC		TOTAL
	N	(%)	N	(%)	N	(%)	
ARM	58	(59%)	18	(18%)	23	(23%)	99
BRI	53	(49%)	44	(41%)	11	(10%)	108
KNS	25	(23%)	65	(60%)	19	(17%)	109
LIN	42	(29%)	79	(55%)	22	(15%)	143
NEW	109	(61%)	57	(32%)	14	(8%)	180
SIX	0	(0%)	0	(0%)	99	(100%)	99
SUM	61	(35%)	98	(56%)	16	(9%)	175
WAR	49	(48%)	36	(35%)	18	(17%)	103
WHI	0	(0%)	0	(0%)	0	(0%)	0
CHE	39	(76%)	9	(18%)	3	(6%)	51
VAN	1	(1%)	0	(0%)	68	(99%)	69
ELE	397	(39%)	397	(39%)	222	(22%)	1016
JHS	40	(33%)	9	(8%)	71	(59%)	120
TOT	437	(38%)	406	(36%)	293	(26%)	1136

TABLE G6

NEWLY ENROLLED MAGNET SCHOOL STUDENTS BY SCHOOL, RACE 1984-85

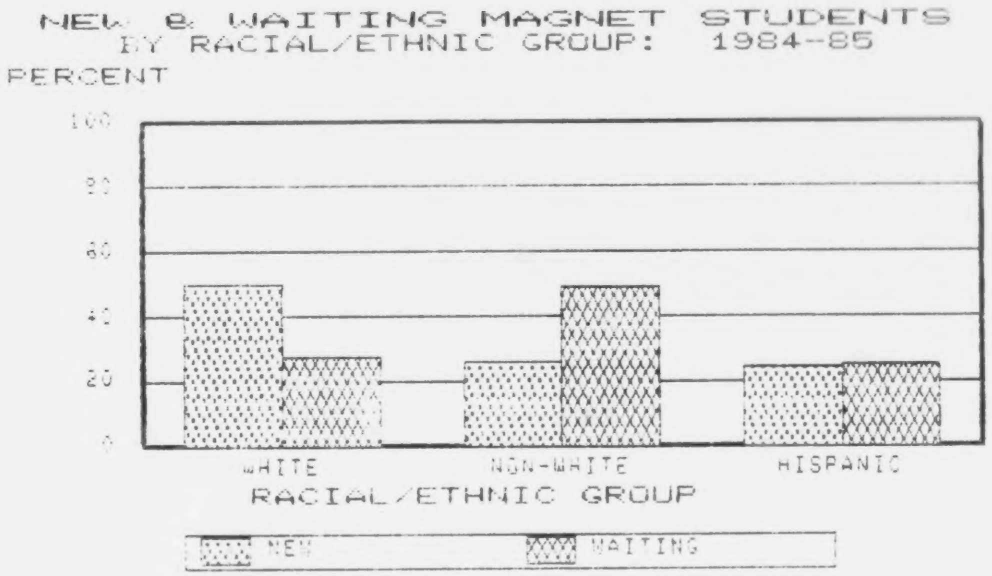
SCHOOL	WHITE		NON-WHITE		HISPANIC		TOTAL
	N	(%)	N	(%)	N	(%)	
ARM	33	(67%)	10	(20%)	6	(12%)	49
BRI	41	(73%)	15	(27%)	0	(0%)	56
KNS	3	(9%)	31	(89%)	1	(3%)	35
LIN	24	(67%)	12	(33%)	0	(0%)	36
NEW	88	(73%)	33	(27%)	0	(0%)	121
SIX	0	(0%)	0	(0%)	70	(100%)	70
SUM	13	(68%)	6	(32%)	0	(0%)	19
WAR	26	(41%)	26	(41%)	11	(17%)	63
WHI	0	(0%)	0	(0%)	0	(0%)	0
CHE	32	(86%)	5	(14%)	0	(0%)	37
VAN	0	(0%)	0	(0%)	35	(100%)	35
ELE	228	(51%)	133	(30%)	88	(20%)	449
JHS	32	(44%)	5	(7%)	35	(49%)	72
TOT	260	(50%)	138	(26%)	123	(24%)	521

TABLE G7

NEW MAGNET SCHOOL STUDENT WAIT LIST BY SCHOOL, RACE 1984-85

SCHOOL	WHITE		NON-WHITE		HISPANIC		TOTAL
	N	(%)	N	(%)	N	(%)	
ARM	23	(53%)	7	(16%)	13	(30%)	43
BRI	4	(10%)	25	(63%)	11	(28%)	40
KNS	21	(32%)	23	(42%)	17	(26%)	66
LIN	7	(8%)	64	(69%)	22	(24%)	93
NEW	8	(20%)	18	(45%)	14	(35%)	40
SIX	0	(0%)	0	(0%)	4	(100%)	4
SUM	45	(31%)	86	(59%)	15	(10%)	146
WAR	19	(66%)	6	(21%)	4	(14%)	29
WHI	0	(0%)	0	(0%)	0	(0%)	0
CHE	1	(25%)	0	(0%)	3	(75%)	4
VAN	1	(6%)	0	(0%)	15	(94%)	16
ELE	127	(28%)	234	(51%)	100	(22%)	461
JHS	2	(10%)	0	(0%)	18	(90%)	20
TOT	129	(27%)	234	(49%)	118	(25%)	481

Graph G2



NEW & WAITING MAGNET STUDENTS BY RACIAL/ETHNIC GROUP: 1984-85

TABLE G8

NEW MAGNET SCHOOL STUDENT WITHDRAWALS BY SCHOOL, RACE 1984-85

SCHOOL	WHITE		NON-WHITE		HISPANIC		TOTAL
	N	(%)	N	(%)	N	(%)	
ARM	2	(29%)	1	(14%)	4	(57%)	7
BRI	8	(67%)	4	(33%)	0	(0%)	12
KNS	1	(13%)	6	(75%)	1	(13%)	8
LIN	11	(79%)	3	(21%)	0	(0%)	14
NEW	13	(68%)	6	(32%)	0	(0%)	19
SIX	0	(0%)	0	(0%)	25	(100%)	25
SUM	3	(30%)	6	(60%)	1	(10%)	10
WAR	4	(36%)	4	(36%)	3	(27%)	11
WHI	0	(0%)	0	(0%)	0	(0%)	0
CHE	6	(60%)	4	(40%)	0	(0%)	10
VAN	0	(0%)	0	(0%)	18	(100%)	18
ELE	42	(40%)	30	(28%)	34	(32%)	106
JHS	6	(21%)	4	(14%)	18	(64%)	28
TOT	48	(36%)	34	(25%)	52	(39%)	134

TABLE G9

New Magnet School Applicants by Year

1977-78 -- 1984-85

		Enrolled		Wait/Hold		Withdrawn		Total
School	Year	N	(%)	N	(%)	N	(%)	N
Arm	1977-78	44	(54%)	11	(14%)	26	(32%)	81
	1978-79	23	(44%)	18	(35%)	11	(21%)	52
	1979-80	32	(91%)	1	(03%)	2	(06%)	35
	1980-81	42	(78%)	4	(07%)	8	(15%)	54
	1981-82	46	(58%)	28	(35%)	5	(06%)	79
	1982-83	46	(52%)	32	(36%)	11	(12%)	89
	1983-84	55	(57%)	35	(36%)	6	(06%)	96
	1984-85	49	(50%)	43	(43%)	7	(07%)	99
Bea	1977-78	23	(20%)	89	(76%)	5	(04%)	117
	1978-79	10	(15%)	55	(81%)	3	(04%)	68
Bri	1977-78	16	(21%)	55	(73%)	4	(05%)	75
	1978-79	18	(50%)	17	(47%)	1	(03%)	36
	1979-80	16	(34%)	24	(51%)	7	(15%)	47
	1980-81	25	(27%)	47	(51%)	21	(23%)	93
	1981-82	6	(20%)	22	(73%)	2	(07%)	30
	1982-83	9	(29%)	18	(58%)	4	(13%)	31
	1983-84	20	(39%)	25	(49%)	6	(12%)	51
	1984-85	56	(52%)	40	(37%)	12	(11%)	108
Kns	1979-80	45	(58%)	19	(25%)	13	(17%)	77
	1980-81	43	(46%)	38	(41%)	12	(13%)	93
	1981-82	53	(44%)	57	(47%)	11	(09%)	121
	1982-83	43	(44%)	47	(48%)	8	(08%)	98
	1983-84	31	(22%)	104	(74%)	6	(04%)	141
	1984-85	35	(32%)	66	(61%)	8	(07%)	109
Lin	1977-78	18	(30%)	39	(65%)	3	(05%)	60
	1978-79	19	(50%)	17	(45%)	2	(05%)	38
	1979-80	17	(45%)	18	(47%)	3	(08%)	38
	1980-81	23	(29%)	51	(65%)	5	(06%)	79
	1981-82	4	(13%)	23	(72%)	5	(16%)	32
	1982-83	17	(45%)	20	(53%)	1	(03%)	38
	1983-84	17	(45%)	32	(62%)	3	(06%)	52
	1984-85	36	(25%)	93	(65%)	14	(10%)	143

Page 2 - TABLE G9

		Enrolled		Wait/Hold		Withdrawn		Total
School	Year	N	(%)	N	(%)	N	(%)	N
New	1977-78	142	(48%)	142	(48%)	12	(04%)	296
	1978-79	152	(73%)	42	(20%)	13	(06%)	207
	1979-80	228	(81%)	21	(07%)	34	(12%)	283
	1980-81	218	(63%)	120	(35%)	9	(03%)	347
	1981-82	167	(59%)	86	(30%)	29	(10%)	282
	1982-83	134	(64%)	56	(27%)	20	(10%)	210
	1983-84	128	(58%)	72	(33%)	19	(09%)	219
	1984-85	121	(67%)	40	(22%)	19	(11%)	180
Six	1984-85	70	(71%)	4	(04%)	25	(25%)	99
Sum	1977-78	35	(14%)	203	(79%)	20	(08%)	258
	1978-79	23	(29%)	43	(55%)	12	(15%)	78
	1979-80	45	(47%)	44	(56%)	6	(06%)	95
	1980-81	32	(23%)	101	(73%)	6	(04%)	139
	1981-82	71	(47%)	78	(52%)	1	(01%)	150
	1982-83	33	(28%)	79	(67%)	6	(05%)	118
	1983-84	23	(14%)	125	(79%)	11	(07%)	159
	1984-85	19	(11%)	146	(83%)	10	(07%)	175
War	1977-78	24	(24%)	71	(70%)	6	(06%)	101
	1978-79	12	(16%)	60	(80%)	3	(04%)	75
	1979-80	40	(93%)	2	(05%)	1	(02%)	43
	1980-81	62	(84%)	9	(12%)	3	(04%)	74
	1981-82	60	(49%)	46	(37%)	17	(14%)	123
	1982-83	50	(48%)	51	(49%)	3	(03%)	104
	1983-84	66	(57%)	40	(34%)	10	(09%)	116
	1984-85	63	(61%)	29	(28%)	11	(11%)	103
Whi (Ell)	1980-81	36	(65%)	2	(04%)	17	(31%)	55
	1981-82	16	(48%)	1	(03%)	16	(48%)	33
	1982-83	17	(53%)	2	(07%)	13	(41%)	32
	1983-84	21	(51%)	7	(17%)	13	(32%)	41
Che	1982-83	7	(37%)	10	(53%)	2	(11%)	19
	1983-84	20	(63%)	6	(19%)	6	(19%)	32
	1984-85	37	(73%)	4	(08%)	10	(20%)	51
Ken	1981-82	41	(80%)	1	(02%)	9	(18%)	51
	1982-83	3	(75%)	0	(0%)	1	(25%)	4
	1983-84	1	(50%)	1	(50%)	1	(0%)	2

Page 3 - TABLE G9

School	Year	Enrolled		Wait/Hold		Withdrawn		Total
		N	(%)	N	(%)	N	(%)	N
Van	1982-83	38	(58%)	5	(08%)	22	(34%)	65
	1983-84	50	(36%)	14	(16%)	25	(28%)	89
	1984-85	35	(51%)	16	(23%)	18	(26%)	69
Total	1977-78	302	(31%)	610	(62%)	76	(08%)	988
	1978-79	257	(46%)	252	(45%)	45	(08%)	554
	1979-80	423	(69%)	129	(21%)	66	(11%)	618
	1980-81	481	(51%)	372	(40%)	81	(09%)	934
	1981-82	464	(51%)	342	(38%)	95	(11%)	901
	1982-83	397	(49%)	320	(40%)	91	(11%)	808
	1983-84	432	(43%)	461	(46%)	105	(11%)	998
	1984-85	521	(46%)	481	(42%)	134	(12%)	1136

TABLE G10

Racial Distribution of Magnet Schools

Actual October 1 Distribution vs Hypothetical Distribution If No Magnet Program

Nine-Year Comparison

School	Race	1976 %			1977 %			1978 %			1979 %			1980 %			1981 %			1982 %			1983 %			1984 %			
		Act	Hyp	Dif	Act	Hyp	Dif	Act	Hyp	Dif	Act	Hyp	Dif	Act	Hyp	Dif	Act	Hyp	Dif	Act	Hyp	Dif	Act	Hyp	Dif	Act	Hyp	Dif	Ave Dif
Arm	W	62	---	---	50	52	- 3	49	52	- 3	48	49	- 1	50	51	1	50	48	+ 2	50	49	+ 1	48	45	+ 3	44	41	+ 3	0
	NW	22	---	---	27	24	+ 3	26	23	+ 3	26	25	+ 1	22	23	- 2	21	23	- 2	23	24	- 1	23	26	- 3	23	25	- 2	0
	H	16	---	---	24	24	0	25	25	0	26	25	+ 1	28	26	+ 2	29	29	0	27	27	0	29	29	0	33	34	- 1	0
Bri	W	16	9	+ 7	14	9	+ 5	13	7	+ 6	10	6	+ 4	11	5	+ 6	12	7	+ 5	9	4	+ 5	10	3	+ 7	15	2	+13	+ 6
	NW	17	18	- 1	16	17	- 1	15	15	0	16	14	+ 2	13	14	- 1	13	11	+ 2	15	12	+ 3	12	11	+ 1	13	9	+ 4	+ 1
	H	68	73	- 5	70	74	- 4	72	78	- 6	74	80	- 6	76	81	- 5	75	82	- 7	77	84	- 7	78	85	- 7	72	89	-17	- 7
Kns	W	76	---	---	74	---	---	72	---	---	69	75	- 6	65	73	- 8	62	72	-10	57	68	-11	57	65	- 8	55	63	- 8	- 9
	NW	19	---	---	16	---	---	19	---	---	23	15	+ 8	26	18	+ 8	30	21	+ 9	31	19	+12	31	21	+10	30	20	+10	+10
	H	5	---	---	9	---	---	9	---	---	8	10	- 2	9	9	0	8	7	+ 1	12	13	- 1	13	14	- 1	15	17	- 2	- 1
Lin	W	28	22	+ 6	17	12	+ 5	14	10	+ 4	14	10	+ 4	14	8	+ 6	9	5	+ 4	9	2	+ 7	9	3	+ 6	14	8	+ 6	+ 5
	NW	0	1	- 1	1	1	0	3	1	+ 2	3	0	+ 3	5	2	+ 3	3	1	+ 2	3	2	+ 1	3	2	+ 1	5	2	+ 3	+ 2
	H	72	77	- 5	82	87	- 5	83	90	- 7	83	90	- 7	82	90	- 8	88	94	- 6	88	96	- 8	88	95	- 7	81	90	- 9	- 7
New	W	41	31	+10	43	26	+17	39	22	+17	39	24	+15	39	23	+16	36	22	+14	35	23	+12	31	18	+13	28	16	+12	+14
	NW	17	20	- 3	14	19	- 5	17	18	- 1	20	16	+ 4	22	16	+ 6	22	15	+ 7	20	14	+ 6	20	13	+ 7	20	15	+ 5	+ 3
	H	42	50	- 8	43	55	-12	44	59	-15	41	60	-19	39	61	-22	42	63	-21	46	63	-17	49	69	-20	52	69	-17	-17

Page 2 TABLE G10 Racial Distribution of Magnet Schools - Nine-Year Comparison

School	Race	1976 %			1977 %			1978 %			1979 %			1980 %			1981 %			1982 %			1983 %			1984 %			
		Act	Hyp	Dif	Act	Hyp	Dif	Act	Hyp	Dif	Act	Hyp	Dif	Act	Hyp	Dif	Act	Hyp	Dif	Act	Hyp	Dif	Act	Hyp	Dif	Act	Hyp	Dif	Ave Dif
Six	W	80	---	---	80	---	---	76	---	---	73	---	---	73	---	---	68	---	---	71	---	---	69	---	---	56	65	- 9	- 9
	NW	19	---	---	20	---	---	23	---	---	25	---	---	25	---	---	29	---	---	27	---	---	29	---	---	23	26	- 3	- 3
	H	1	---	---	0	---	---	1	---	---	1	---	---	2	---	---	3	---	---	2	---	---	2	---	---	22	9	+13	+13
Sum	W	61	---	---	62	63	- 1	62	62	0	56	58	- 2	62	64	- 2	57	63	- 6	56	62	- 6	51	56	- 5	55	57	- 2	- 3
	NW	22	---	---	23	20	+ 3	20	20	0	22	17	+ 5	20	15	+ 5	24	14	+10	25	14	+11	26	18	+ 8	25	18	+ 7	+ 6
	H	17	---	---	15	17	- 2	18	18	0	21	25	- 4	18	21	- 3	20	24	- 4	19	24	- 5	23	26	- 3	20	24	- 4	- 3
War	W	63	71	- 8	57	68	- 9	55	61	- 6	58	62	- 4	58	62	- 4	56	64	- 8	57	67	-10	53	63	-10	51	60	- 9	- 8
	NW	35	26	+ 9	42	32	+10	44	37	+ 7	40	35	+ 5	40	34	+ 6	38	31	+ 7	37	28	+ 9	41	30	+11	40	33	+ 7	+ 8
	H	2	2	0	0	0	0	2	2	0	2	2	0	4	4	0	6	4	+ 2	6	4	+ 2	6	7	- 1	8	7	+ 1	0
Whi	W	68	---	---	69	---	---	66	---	---	66	---	---	58	---	---	57	63	- 6	56	59	- 3	54	60	- 6	53	57	- 4	- 5
	NW	30	---	---	28	---	---	29	---	---	30	---	---	26	---	---	21	24	- 3	23	26	- 3	22	25	- 3	22	24	- 2	- 3
	H	2	---	---	3	---	---	5	---	---	4	---	---	16	---	---	22	14	+ 8	21	15	+ 6	24	15	+ 9	24	19	+ 5	+ 7
Che	W	21	---	---	17	---	---	15	---	---	12	---	---	9	---	---	9	---	---	9	8	+ 1	12	7	+ 5	14	6	+ 8	+ 5
	NW	22	---	---	23	---	---	18	---	---	13	---	---	10	---	---	11	---	---	12	11	+ 1	11	10	+ 1	10	10	0	+ 1
	H	57	---	---	60	---	---	67	---	---	75	---	---	81	---	---	81	---	---	79	81	- 2	77	83	- 6	75	84	- 9	- 6
Van	W	54	---	---	51	---	---	51	---	---	48	---	---	47	---	---	46	---	---	45	47	- 2	40	43	- 3	39	43	- 4	- 3
	NW	35	---	---	36	---	---	36	---	---	36	---	---	38	---	---	38	---	---	34	36	- 2	34	38	- 4	33	36	- 3	- 3
	H	11	---	---	12	---	---	13	---	---	16	---	---	15	---	---	15	---	---	20	17	+ 3	26	19	+ 7	28	21	+ 7	+ 6

TABLE G11

Racial Distribution of Students

Actual October 1 Distribution vs Hypothetical Distribution If No Magnet Program

(Elementary & Junior High Schools)

	Percent--White			Percent--Non-White			Percent--Hispanic		
School	Act	Hyp	Dif	Act	Hyp	Dif	Act	Hyp	Dif
*Arm	44	41	+ 3	23	25	- 2	33	34	- 1
Bal	53	54	- 1	44	43	+ 1	4	4	0
Bea	76	76	0	18	19	- 1	6	6	0
Bow	44	44	0	22	22	0	34	34	0
*Bri	15	2	+13	13	9	+ 4	72	89	-17
Bro	31	35	- 4	29	30	- 1	39	35	+ 4
Bru	53	51	+ 2	44	46	- 2	3	3	0
DeB	17	18	- 1	39	39	0	44	44	0
Dor	41	42	- 1	46	45	+ 1	13	13	0
Ell	36	41	- 5	48	48	0	16	11	+ 5
Fre	54	59	- 5	36	33	+ 3	10	8	+ 2
Gle	27	27	0	21	22	- 1	53	52	+ 1
Gli	48	49	- 1	43	44	- 1	8	7	+ 1
Har	73	72	+ 1	21	22	- 1	6	6	0
Hom	28	28	0	62	62	0	10	10	0
How	20	20	0	30	31	- 1	50	49	+ 1
IOE	62	60	+ 2	26	27	- 1	13	12	+ 1
*Kns	55	63	- 8	30	20	+10	15	17	- 2
Lib	54	54	0	24	24	0	22	22	0
*Lin	14	8	+ 6	5	2	+ 3	81	90	- 9
Lyn	62	62	0	33	34	- 1	5	4	+ 1
Mem	79	80	- 1	16	15	+ 1	5	5	0
*New	28	16	+12	20	15	+ 5	52	69	-17
Pot	38	38	0	18	20	- 2	44	42	+ 2
*Six	56	65	- 9	23	26	- 3	22	9	+13
*Sum	55	57	- 2	25	18	+ 7	20	24	- 4
Tal	54	52	+ 2	46	48	- 2	0	0	0
*War	51	60	- 9	40	33	+ 7	8	7	+ 1
Was	73	74	- 1	20	21	- 1	6	6	0
*Whi	53	57	- 4	22	24	- 2	24	19	+ 5
*Che	14	6	+ 8	10	10	0	75	84	- 9
Dug	41	42	- 1	47	46	+ 1	12	12	0
For	65	66	- 1	20	19	+ 1	15	15	0
Ken	45	46	- 1	38	38	0	17	16	+ 1
Kil	67	67	0	31	31	0	2	2	0
*Van	39	43	- 4	33	36	- 3	28	21	+ 7

*Magnet Schools

TABLE G12

Total Applications per Student* by Race and Regularly Assigned School

Assigned School	Total Applications W	NW	H	Tot	Total Applications Per Student W	NW	H	Tot
Arm	23	30	5	58	.11	.24	.03	.12
Bal	22	21	1	44	.12	.15	.08	.13
Bea	12	2	0	14	.07	.05	.00	.06
Bow	2	10	5	17	.01	.12	.04	.04
Bri	0	2	55	57	.00	.05	.16	.15
Bro	85	52	32	169	.34	.24	.13	.23
Bru	7	39	1	47	.03	.18	.07	.10
DeB	20	17	2	39	.28	.11	.01	.10
Dor	14	26	2	42	.09	.16	.04	.12
Ell	86	76	13	175	.58	.44	.32	.48
Fre	62	22	1	85	.31	.20	.04	.25
Gle	11	16	16	43	.13	.22	.09	.13
Gil	38	40	4	82	.21	.24	.14	.22
Har	6	11	0	17	.03	.17	.00	.06
Hom	26	41	6	73	.24	.17	.15	.19
How	3	13	8	24	.03	.10	.04	.05
IOE	23	47	7	77	.08	.36	.12	.16
Kns	7	4	0	11	.03	.05	.00	.03
Lib	6	13	7	26	.03	.15	.09	.07
Lin	0	1	72	73	.00	.08	.14	.13
Lyn	13	17	1	31	.06	.16	.07	.10
Mem	18	2	0	20	.08	.05	.00	.07
New	21	8	15	44	.17.	.07	.03	.06
Pot	12	27	11	50	.06	.24	.05	.09
Six	7	4	1	12	.02	.04	.03	.03
Sum	3	1	0	4	.01	.02	.00	.01
Tal	9	24	2	35	.06	.16	1.00	.11
War	17	10	0	27	.12	.13	.00	.11
Was	65	22	0	87	.18	.22	.00	.18
Whi	24	15	4	43	.11	.17	.06	.11
Total Elementary	642	613	271	1526	.12	.18	.09	.12
Che	1	0	141	142	.02	.00	.17	.15
Dug	13	4	2	19	.04	.01	.02	.03
For	42	4	2	48	.07	.02	.15	.05
Ken	16	2	1	19	.05	.01	.01	.03
Kil	16	0	0	16	.02	.00	.00	.01
Van	16	3	1	20	.04	.01	.01	.02
Total Junior High	104	13	147	264	.04	.01	.11	.05
Grand Total	746	626	418	1790	.10	.13	.09	.10

$$\text{*Applications Per Student} = \frac{\text{Enrolled + Wait List + Withdrawals}}{\text{Hypothetical School Enrollment If No Magnet}}$$

TABLE G13

Metropolitan Reading Achievement Test Results

Magnet Schools

			Level, Form		Scale Score			Grade Equivalent				Percentile Rank			Normal Curve Equivalent			Percent Improved
School	Gr.	N	Pre	Pst	Pre	Pst	Dif	Pre	Pst	Dif	(Exp)	Pre	Pst	Dif	Pre	Pst	Dif	≥ Exp
Bri	4	49	ELEJS	ELEJS	639	675	+36	3.0	3.9	+0.9*	(0.6)	34	40	+ 6	41.3	44.7	+3.4	47%
Kns	4	67	ELEJS	ELEJS	659	699	+40	3.4	4.9	+1.5*	(0.6)	44	52	+ 8	46.8	51.1	+4.3	66%
Lin	4	56	ELEJS	ELEJS	660	709	+49	3.4	5.4	+2.0*	(0.6)	44	58	+14	46.8	54.2	+7.4**	73%
Six	4	80	ELEJS	ELEJS	672	722	+50	3.8	6.1	+2.3*	(0.6)	50	64	+14	50.0	57.5	+7.5**	75%
Sum	4	76	ELEJS	ELEJS	676	715	+39	3.9	5.7	+1.8*	(0.6)	52	60	+ 8	51.1	55.3	+4.2	65%
Arm	5	141	ELEJS	INTJS	695	719	+24	4.7	5.9	+1.2*	(1.0)	50	52	+ 2	50.0	51.1	+1.1	45%
New	5	244	ELEJS	INTJS	681	706	+25	4.1	5.3	+1.2*	(1.0)	44	44	+ 0	46.8	46.8	+0.0	45%
War	5	114	ELEJS	INTJS	701	730	+29	5.0	6.5	+1.5*	(1.0)	54	58	+ 4	52.1	54.2	+2.1	55%
Arm	6																	
New	6																	
War	6																	
Che	7	215	ADVJS	ADVJS	711	744	+33	5.5	7.2	+1.7*	(0.7)	38	46	+ 8	43.6	47.9	+4.3	60%
Van	7	189	ADVJS	ADVJS	708	730	+22	5.4	6.5	+1.1*	(0.7)	36	38	+ 2	42.5	43.6	+1.1	55%
Total	4	328	ELEJS	ELEJS	663	706	+43	3.5	5.3	+1.8*	(0.6)	46	56	+10	47.9	53.2	+5.3	66%
	5	499	ELEJS	INTJS	689	715	+26	4.4	4.7	+1.3*	(1.0)	48	50	+ 2	48.9	50.0	+1.1	47%
	6																	
	7	404	ADVJS	ADVJS	709	737	+28	5.4	6.9	+1.5*	(0.7)	36	42	+ 6	42.5	45.3	+3.3	57%
Total	4-7	1231	----	----	---	---	---	---	---	+1.5*	(0.8)	44	49	+ 5	46.8	49.5	+2.7	56%

*Mean GE gain ≥ month/month

**Mean NCE gain ≥ 7.0

241

245

TABLE G14

Metropolitan Mathematics Achievement Test Results

Magnet Schools

			Level, Form		Scale Score			Grade Equivalent				Percentile Rank			Normal Curve Equivalent			Percent Improved
School	Gr.	N	Pre	Pst	Pre	Pst	Dif	Pre	Pst	Dif	(Exp)	Pre	Pst	Dif	Pre	Pst	Dif	≥ Exp
Bri	4	46	PR2JI	ELEJS	573	589	+16	3.9	4.2	+0.3	(1.0)	54	36	-18	52.1	42.5	-9.6	13%
Kns	4	62	PR2JI	ELEJS	589	653	+64	4.2	5.6	+1.4*	(1.0)	[illegible]	66	+ 4	56.4	58.7	+2.3	66%
Lin	4	49	PR2JI	ELEJS	569	642	+73	3.8	5.3	+1.5*	(1.0)	52	60	+ 8	51.1	55.3	+4.2	69%
Six	4	72	PR2JI	ELEJS	608	637	+29	4.6	5.2	+0.6	(1.0)	68	58	-10	59.9	54.2	-5.7	31%
Sum	4	68	PR2JI	ELEJS	604	670	+66	4.5	6.0	+1.5*	(1.0)	68	72	+ 4	59.9	62.3	+2.4	59%
Arm	5	139	ELEJS	INTJS	640	673	+33	5.3	6.1	+0.8	(1.0)	60	54	- 6	55.3	52.1	-3.2	44%
New	5	237	ELEJS	INTJS	628	644	+16	5.0	5.4	+0.4	(1.0)	54	40	-14	52.1	44.7	-7.4	38%
War	5	91	ELEJS	INTJS	628	675	+47	5.0	6.1	+1.1*	(1.0)	54	56	+ 2	52.1	53.2	+1.1	52%
Arm	6																	
New	6																	
War	6																	
Che	7	178	INTJS	ADVJS	707	732	+25	6.9	7.8	+0.9	(1.0)	56	50	- 6	53.2	50.0	-3.2	43%
Van	7	162	INTJS	ADVJS	709	718	+ 9	7.0	7.3	+0.3	(1.0)	56	40	-16	53.2	44.7	-8.5	31%
Total	4	297	PR2JI	ELEJS	591	641	+50	4.3	5.3	+1.0*	(1.0)	62	60	- 2	56.4	55.3	-1.1	48%
	5	467	ELEJS	INTJS	631	659	+28	5.1	5.7	+0.6	(1.0)	56	48	- 8	53.2	48.9	-4.3	42%
	6																	
	7	340	INTJS	ADVJS	708	726	+18	7.0	7.6	+0.6	(1.0)	56	46	-10	53.2	47.9	-5.3	37%
Total	4-7	1104	----	----	---	---	---	---	---	+0.7	(1.0)	58	51	- 7	54.2	50.5	-3.7	42%

*Mean ≥ month/month

TABLE G15

Ratios of Obtained to Expected Grade Equivalent Gains
Elementary Magnet Schools
Eight-Year Comparison

	Ratio	
Year	Reading	Math
1977-78	0.86	1.00
1978-79	0.86	1.00
1979-80	1.00	1.00
1980-81	0.86	1.00
1981-82	1.14	1.00
1982-83	1.14	1.29
1983-84	1.57	1.14
1984-85	1.88	0.70

TABLE G16

Mean NCE Change
Elementary Magnet Schools
Eight-Year Comparison

	Ratio	
Year	Reading	Math
1977-78	+1.1	+2.1
1978-79	+0.5	+2.1
1979-80	+0.6	+1.5
1980-81	+1.1	+2.1
1981-82	+1.0	+2.1
1982-83	+0.5	+3.2
1983-84	+2.7	+2.1
1984-85	+2.7	-3.7

TABLE G17

Percent of Students Attaining Month-for-Month Gain
Elementary Magnet Schools
Six-Year Comparison

Year	Percent	
	Reading	Math
1979-80	55%	59%
1980-81	61%	62%
1981-82	57%	63%
1982-83	60%	69%
1983-84	66%	63%
1984-85	56%	42%

TABLE C18

Metropolitan Achievement Test Results

Magnet Students vs Regularly Assigned Students at Magnet Schools

				Level, Form		Scale Score			Grade Equivalent				Percentile Rank			Normal Curve Equivalent			Percent Improved
Gr.	Subtest	Grp	N	Pre	Pst	Pre	Pst	Dif	Pre	Pst	Dif	(Exp)	Pre	Pst	Dif	Pre	Pst	Dif	≥ Exp
4	Read	Mag	61	ELEJS	ELEJS	663	714	+51	3.5	5.7	+2.2*	(0.6)	46	60	+14	47.9	55.3	+7.4**	75%
		Reg	267	ELEJS	ELEJS	663	704	+41	3.5	5.2	+1.7*	(0.6)	46	56	+10	47.9	53.2	+5.3	64%
	Math	Mag	54	PR2JI	ELEJS	590	647	+57	4.3	5.4	+1.1*	(1.0)	62	64	+ 2	56.4	57.5	+1.1	56%
		Reg	243	PR2JI	ELEJS	591	640	+49	4.3	5.3	+1.0*	(1.0)	62	60	- 2	56.4	55.3	-1.1	47%
5	Read	Mag	183	ELEJS	INTJS	714	736	+22	5.7	6.8	+1.1*	(1.0)	60	60	+ 0	55.3	55.3	+0.0	43%
		Reg	316	ELEJS	INTJS	675	703	+28	3.9	5.1	+1.2*	(1.0)	40	42	+ 2	44.7	45.8	+1.1	50%
	Math	Mag	166	ELEJS	INTJS	661	680	+19	5.8	6.2	+0.4	(1.0)	68	58	-10	59.9	54.2	-5.7	37%
		Reg	301	ELEJS	INTJS	615	647	+32	4.8	5.4	+0.6	(1.0)	48	42	- 6	48.9	45.8	-3.1	45%
6	Read	Mag																	
		Reg																	
	Math	Mag																	
		Reg																	
7	Read	Mag	61	ADVJS	ADVJS	771	794	+23	8.8	10.0	+1.2*	(0.7)	66	70	+ 4	58.7	61.0	+2.3	33%
		Reg	343	ADVJS	ADVJS	698	727	+29	4.8	6.4	+1.6*	(0.7)	30	38	+ 8	39.0	43.6	+4.6	62%
	Math	Mag	51	INTJS	ADVJS	768	796	+28	9.4	11.3	+1.9*	(1.0)	80	77	- 3	67.7	65.6	-2.1	25%
		Reg	289	INTJS	ADVJS	697	713	+16	6.7	7.1	+0.4	(1.0)	52	38	-14	51.1	43.6	-7.5	39%
Tot	Read	Mag	305	----	----	---	---	---	---	---	+1.3*	(0.8)	58	62	+ 4	54.2	56.4	+2.2	48%
		Reg	926	----	----	---	---	---	---	---	+1.5*	(0.8)	38	45	+ 7	43.6	47.4	+3.8	58%
	Math	Mag	271	----	----	---	---	---	---	---	+0.8*	(1.0)	69	63	- 6	60.4	57.0	-3.4	39%
		Reg	833	----	----	---	---	---	---	---	+0.6	(1.0)	53	46	- 7	51.6	47.9	-3.7	43%

*Mean GE gain ≥ month/month

**Mean NCE gain ≥ 7.0

TABLE G19

Elementary Magnet School Cross-Racial Selection Rates

Seven-Year Comparison

Magnet School	Percent of Selections That Were Cross-Racial 78-79	79-80	80-81	81-82	82-83	83-84	84-85	Magnet Average
Arm	32%	37%	41%	33%	41%	45%	50%	40%
Bea	31%	---	---	---	---	---	---	31%
Bri	41%	40%	46%	42%	47%	29%	42%	41%
Ell	---	---	44%	---	---	---	---	44%
Kns	---	32%	48%	47%	47%	48%	56%	46%
Lin	21%	17%	36%	23%	36%	32%	28%	28%
New	28%	35%	36%	30%	33%	41%	37%	34%
Six	---	---	---	---	---	---	43%	43%
Sum	35%	31%	37%	44%	47%	41%	49%	41%
War	24%	36%	32%	38%	39%	40%	51%	37%
Whi	---	---	---	40%	48%	44%	---	44%
Total Mag Schools	31%	34%	38%	35%	40%	41%	44%	38%
Total Non Mag Schools	29%	31%	33%	35%	38%	41%	43%	36%

TABLE G20

Magnet Parent Perceptions of Magnet Schools

Success Rating of Objectives

Seven Point Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

					Mean Rating							
N=	37	23	28	13	70	27	32	72	8	32	20	362
Objective	Arm	Bri	Kns	Lin	New	ix	Sum	War	Whi	Che	Van	Total
1. Providing a high quality educational program.	6.19	5.91	5.89	6.23	6.09	5.93	5.42	6.04	6.50	5.69	5.37	5.93
2. Providing a strong program in the basic skill areas.	6.16	6.22	6.00	6.54	5.96	5.89	5.71	6.07	6.38	5.75	5.42	5.98
3. Providing frequent opportunities for enrichment experiences.	5.68	5.45	5.79	5.85	6.23	6.15	5.29	5.93	6.13	5.68	5.00	5.83
4. Encouraging friendships between students of different races or ethnic groups.	5.46	6.00	5.14	5.85	5.64	6.41	5.61	5.59	6.57	4.91	6.05	5.63
5. Providing opportunities for parents to become involved in school activities.	5.19	5.13	5.75	3.92	5.02	6.41	6.16	5.83	6.50	4.19	5.26	5.40
6. Providing an enjoyable learning experience for students.	5.84	5.96	6.00	6.46	6.23	6.30	5.71	6.22	6.57	5.44	5.63	6.03

TABLE G21

Magnet Parent Overall Success Rating of Magnet Schools

Seven-Point Scale: 1 (Very UNsuccessful) -- 7 (Highly Successful)

School	N	Rating
Ann	37	6.19
Bri	23	6.17
Kns	27	6.15
Lin	12	6.33
New	67	6.27
Six	26	6.42
Sum	32	6.13
War	71	6.15
Whi	8	7.00
Che	30	5.67
Van	19	5.79
TOTAL	352	6.16

TABLE G22

Parents' Primary Reasons for Selecting Each Magnet School

School	Primary Reasons
Arm	1. Math/Computer Program
	2. Academic Standards
Bri	1. All-Day Kindergarten
	2. Reputation/Siblings
Kns	1. More Opportunities Available
	2. Reading Program
Lin	1. Math Program
	2. Computer Learning Program
New	1. Enrichment Opportunities
	2. Reputation/Siblings
Six	1. Integration
	2. Reputation
Sum	1. Reputation/Siblings
	2. Individualized Program
War	1. Reputation/Siblings
	2. Academic Standards
Che	1. Math/Computer Program
	2. Enrichment Opportunities
Van	1. Reputation
	2. Discipline

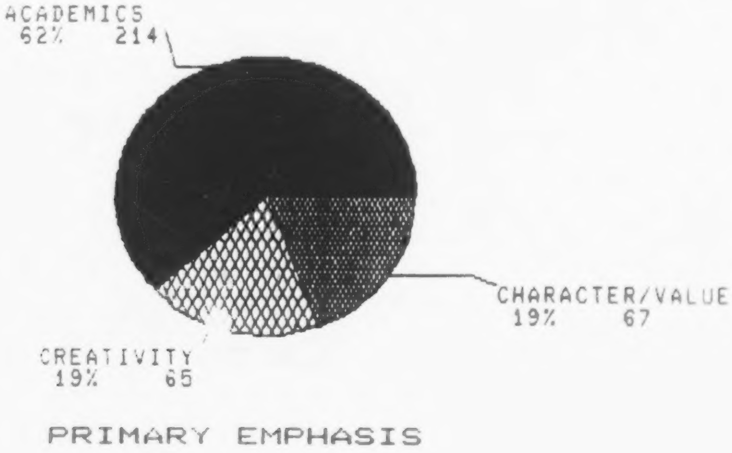
TABLE G23

Magnet Parent Perceptions Regarding What Should Be The Primary Emphasis of a School

School	N	Academic Standards	Developing Individual Creativity	Developing Character and Values
		Number (Percent) Indicating		
Arm	37	28 (76%)	3 (8%)	6 (16%)
Bri	21	12 (57%)	5 (24%)	4 (19%)
Kns	26	12 (46%)	6 (23%)	8 (31%)
Lin	12	9 (75%)	2 (17%)	1 (8%)
New	67	43 (64%)	13 (19%)	11 (16%)
Six	26	11 (42%)	6 (23%)	9 (35%)
Sum	30	18 (60%)	7 (23%)	5 (17%)
War	69	40 (58%)	16 (23%)	13 (19%)
Whi	7	2 (29%)	3 (43%)	2 (29%)
Che	32	26 (81%)	3 (9%)	3 (9%)
Van	19	13 (68%)	1 (5%)	5 (26%)
Total	346	214 (62%)	65 (19%)	67 (19%)

Graph G 3

PARENT PERCEPTIONS OF WHAT SHOULD BE THE PRIMARY EMPHASIS OF SCHOOL



Graph G4

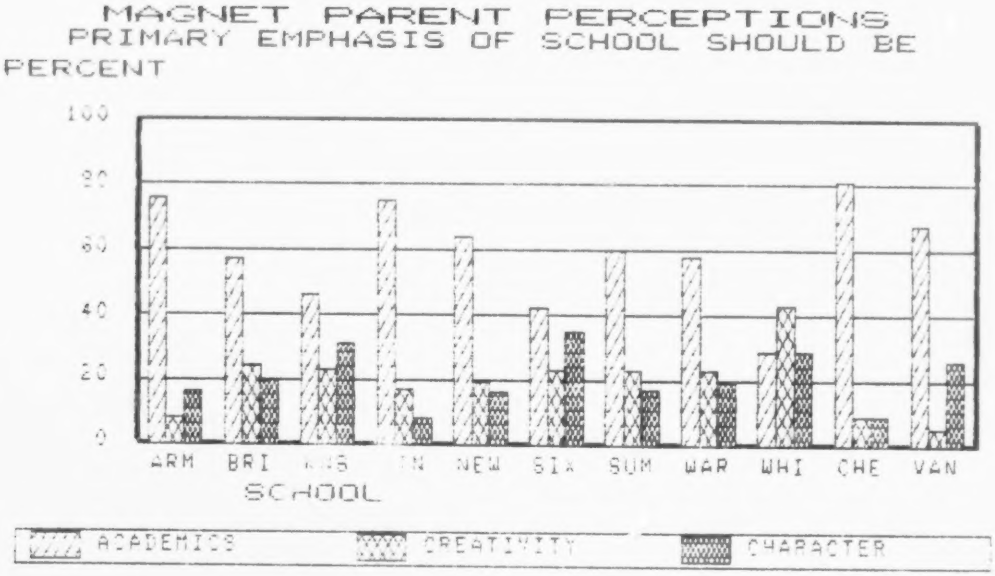

MAGNET PARENT PERCEPTIONS
PRIMARY EMPHASIS OF SCHOOL SHOULD BE
PERCENT
100
80
60
40
20
0
ARM
BRI
NEW
SIX
SUM
WAR
WHI
CHE
VAN
SCHOOL
ACADEMICS
CREATIVITY
CHARACTER

TABLE G24

Magnet Parent Perceptions Regarding What Should Be The Primary Emphasis of a School Two-Year Comparison

	Percent Indicating:					
	Academic Standards		Developing Individual Creativity		Developing Character and Values	
School	83-84	84-85	83-84	84-85	83-84	84-85
Arm	61%	76%	27%	8%	11%	16%
Bri	60%	57%	30%	24%	10%	19%
Kns	43%	46%	30%	23%	26%	31%
Lin	62%	75%	24%	17%	14%	8%
New	68%	64%	22%	19%	10%	16%
Six	---	42%	---	23%	---	35%
Sum	50%	60%	36%	23%	14%	17%
War	54%	58%	22%	23%	24%	19%
Whi	50%	29%	10%	43%	40%	29%
Che	83%	81%	9%	9%	9%	9%
Van	46%	68%	15%	5%	38%	26%
TOTAL	59%	62%	24%	19%	17%	19%

TABLE G25

Magnet Parent Perceptions Concerning the Importance
of Various School Factors when Selecting a Magnet School
Three Point Scale: 1 (Not At All Important) -- 3 (Very Important)

	Importance Ratings											
	N= 37	23	28	12	70	27	32	72	7	32	19	359
School Factor	Arm	Bri	Kns	Lin	New	Six	Sum	War	Whi	Che	Van	Total
1. Strict discipline	2.62	2.52	2.43	2.17	2.59	2.74	2.55	2.74	2.57	2.78	2.84	2.63
2. Parent involvement	2.51	2.61	2.68	2.42	2.43	2.78	2.90	2.73	2.57	2.63	2.61	2.63
3. Strong basic skills program	3.00	3.00	2.96	3.00	2.99	2.85	2.97	2.96	2.67	2.97	2.69	2.95
4. Enrichment opportunities	2.84	2.91	2.85	3.00	2.86	2.65	2.65	2.86	2.86	2.94	2.82	2.84
5. Teaching traditional values	2.38	2.65	2.68	2.58	2.57	2.70	2.50	2.63	2.83	2.71	2.59	2.60
6. Individual study and projects	2.54	2.70	2.78	2.75	2.67	2.56	2.74	2.81	2.71	2.72	2.61	2.70
7. Racially diverse population	2.22	2.17	2.63	2.25	2.24	2.19	1.97	2.35	2.14	2.25	2.44	2.27
8. Teaching about other cultures	2.49	2.65	2.61	2.67	2.46	2.48	2.58	2.57	2.43	2.44	2.89	2.55
9. Access to computers	2.54	2.26	2.61	2.75	2.56	2.96	2.63	2.54	2.33	2.78	2.67	2.59
10. Frequent homework assignments	2.68	2.35	2.68	2.25	2.64	2.89	2.56	2.71	2.86	2.73	2.89	2.67

TABLE G26

Most Frequently Selected Additional Programs or Emphasis that Magent Parents Feel Would Benefit Students

School	Additional Programs or Emphasis
Arm	1. Drama/Creative Expression 2. Physical Education/Sports 3. Arts & Crafts
Bri	1. Physical Education/Sports 2. Field Trips 3. Teaching of Values
Kns	1. Community Involvement 2. Computers 3. Teaching of Values
Lin	1. Physical Education/Sports 2. Science Enrichment 3. Social Studies Enrichment
New	1. Computers
Six	1. Physical Education 2. Theatre Arts 3. Home Economics
Sum	1. Computers 2. Physical Education/Sports 3. Instrumental Music
War	1. Computers 2. Physical Education/Sports 3. Foreign Language for all
Che	1. Computers 2. School Newspaper 3. Physical Education/Sports
Van	1. Career Education 2. Dramatics

TABLE G27

Magnet School Student Perceptions of Magnet Schools

		Percent of Responses "Strongly Agree" or "Agree									
	N=	344	65	77	70	647	89	168	272	79	44	1855
	Statement	Arm	Bri	Kns	Lin	New	Six	Sum	War	Che	Van	Total
1.	I enjoyed school this year	86%	92%	91%	91%	92%	90%	86%	93%	97%	100%	91%
2.	I learned a lot at school this year	96%	97%	95%	97%	95%	98%	95%	99%	96%	98%	96%
3.	This school is a friendly school	71%	97%	88%	91%	85%	94%	75%	86%	87%	93%	83%
4.	This year in school I made some new friends who do not live near me	92%	91%	90%	96%	96%	91%	88%	97%	96%	95%	94%
5.	I often worked with other students in small group activities this year	82%	92%	91%	96%	82%	89%	82%	84%	81%	80%	84%
6.	I learned about people from other cultures and countries at school this year	83%	92%	79%	96%	85%	89%	96%	89%	78%	75%	86%
7.	I am happy that I was able to attend this school	79%	95%	84%	96%	90%	90%	[illegible]2%	90%	96%	98%	88%
	Overall Rating Scale: 1 (Very Poor) - 5 (Very Good)	4.02	4.45	4.39	4.56	4.48	4.39	4.30	4.26	4.48	4.39	4.34

TABLE G28

Magnet School Student Perceptions of Magnet Schools

Nine-Year Comparison

Percent "Strongly Agree" or "Agree"

		Year								
	Statement	76-77	77-78	78-79	79-80	80-81	81-82	82-83	83-84	84-85
1.	I enjoyed school this year	95%	92%	91%	90%	92%	84%	89%	89%	91%
2.	I learned a lot at school this year	---	96%	96%	96%	97%	95%	95%	94%	96%
3.	This school is a friendly school	---	---	---	80%	83%	80%	83%	79%	83%
4.	This year in school I made some new friends who do not live near me	95%	94%	91%	92%	94%	94%	94%	93%	94%
5.	I learned about people from other cultures and countries at school this year	---	---	---	---	---	---	---	85%	86%
6.	I often worked with other students in small group activities this year	---	---	---	---	---	---	---	88%	84%
7.	I am happy that I was able to attend this school	---	---	87%	86%	89%	85%	85%	83%	88%

TABLE G29

Magnet Student Overall Ratings of Magnet Schools

Five Point Scale: 1 (Very Poor) to 5 (Very Good)

Five-Year Comparison

	Mean Rating				
School	80-81	81-82	82-83	83-84	84-85
Armory	4.11	4.14	3.96	3.90	4.02
Brightwood	4.48	4.71	4.74	4.91	4.45
Chestnut	----	----	----	4.79	4.48
Kensington	4.63	4.78	4.30	4.50	4.39
Lincoln	4.62	4.51	4.41	4.86	4.56
New North	4.50	4.43	4.48	4.61	4.48
Sixteen Acres	----	----	----	----	4.39
Sumner Avenue	4.27	----	4.13	4.25	4.30
Van Sickle	----	----	----	4.05	4.39
Warner	4.28	4.11	4.33	4.22	4.26
White	----	4.45	4.23	4.24	----
Total	4.40	4.35	4.26	4.33	4.34

TABLE G30

What Magnet School Students Liked Most and Least About School

School	Most	Least
Arm	1. Math	1. Social Studies
	2. Teacher(s)	2. Teacher(s)
	3. Trips	3. Nothing
	4. Computers	4. Reading
Bri	1. Teacher(s)	1. Detention
	2. Trips	2. Students
	3. Math	3. Math
	4. Reading	4. Music
Kns	1. Math	1. Language Arts
	2. Teacher(s)	2. Math
	3. Science	3. Reading
	4. Reading	4. Nothing
Lin	1. Computers	1. Punishments
	2. Math	2. Reading
	3. Teacher(s)	3. Nothing
	4. Gym	4. Math
New	1. Pool/Swimming	1. Nothing
	2. Gym	2. Social Studies
	3. Teacher(s)	3. Music
	4. Students/Friends	4. Pool/Swimming
Six	1. Math	1. Nothing
	2. Teacher(s)	2. Reading
	3. Students/Friends	3. Language Arts
	4. Everything	4. Math
Sum	1. Art	1. Nothing
	2. Math	2. Math
	3. Teacher(s)	3. Reading
	4. Reading	4. Science
War	1. Trips	1. Food/Lunch
	2. Assemblies	2. Nothing
	3. Teacher(s)	3. Math
	4. Students/Friends	4. Students
Che	1. Teacher(s)	1. Students
	2. Computers	2. Lunches
	3. Students/Friends	3. Principal Leaving
	4. Trips	4. Nothing
Van	1. Teacher(s)	1. Teacher(s)
	2. Students/Friends	2. Nothing
	3. Activities	3. Social Studies
	4. Swimming	4. Lunches

H. Program Evaluation: Science Programs

Ten schools allocated some Chapter 636 funding in the area of science, two for the first time this year. At Bowles, an enrichment program in science was offered for selected students. At Dorman, Kensington, New North, Pottenger, and White, science resource teachers provided students with regular opportunities for hands-on experiences in science. Students would frequently work together in racially mixed groups to complete investigations. As one teacher reported: "The weekly 'hands-on' laboratory investigations provide opportunities for cooperation and integration. Children work together to observe changes, manipulate equipment, and interpret results." Lessons dealing with nutrition, such as making butter, peanut butter, and fruit trees, provided much interaction and discussion in the first and second grades. At the third and fourth grade levels, concepts dealing with the solar system, the environment, and soil also fostered much interaction between the children. Measuring planet distances from the sun, finding, counting, and recording living and non living members of the playground community, and dissolving, filtering, and "cooking" soil were some of the activities that involved the children in group interaction in science. Two part-time teachers at Sumner Avenue School gathered resources and set up kits and materials to enable classroom teachers to conduct weekly science investigations in their classrooms. At Chestnut, all classrooms were scheduled into the lab according to a pre-established schedule, while at Duggan and Forest Park, science teachers signed up for labs they were interested in or requested certain laboratory experiments or demonstrations, which meant that some students were not served as frequently as others. The Chapter 636 teachers at both Duggan and Forest Park feel that their programs could be improved by adopting a pre-established schedule to serve all students on a regular basis and recommend this change for the next school year. In addition to providing regular laboratory experiences, teachers at New North, Pottenger, and Chestnut coordinated school-wide science fairs in which hundreds of students from grades three to nine participated, often spending several months individually or in pairs or groups (many mixed race/ethnic groups) in preparation.

Objectives of science programs were to improve achievement in science, to improve student attitude toward science, and to improve integration (by working in mixed race/ethnic pairs or groups doing science investigations on a regular basis). In order to measure science achievement gains, Fall-Spring testing of the Metropolitan science subtest (part of the city-wide testing program) was utilized in grade 4 while Spring-Spring testing of the Metropolitan science subtest (using different levels of the Metro) was utilized in grades 5 and 7. Only grade 6 pre results were available as sixth grade students participated in the standardization of the new Metropolitan Achievement Test in the Spring of 1985, the results of which have not been obtained.

Results of the achievement testing are shown in Table H1. Results for grade 4 were very positive. Average grade equivalent gain was 15 months, more than twice the expected gain; percentile rank change was positive as was NCE change, and 74% of the students showed month-for-month or greater grade equivalent gain. Results for grade 5 were less positive as were those at the junior high school level, though, in the opinion of this evaluator, these results could be, at least partially, the result of utilization of year-to-year testing with different testing levels or the use of a test that does not accurately reflect the curriculum at these grade levels. In any case, the progress in science at the seventh grade school level was far less than desirable. A review of the science lab program and curriculum at this level seems warranted.

Compared to previous years, the science programs were not as successful at improving science achievement, though a different testing instrument was used this year and last year (the CTBS was used for the first five years), and this year Spring-Spring testing using different levels was used for the first time (see Table H2-H4). The ratio of obtained to expected grade equivalent gain, mean

NCE gain, and the percent of students with month-for-month or greater gain were all lower than in any previous years.

The science programs, at least on the junior high school level, appear to have made a positive impact on student attitudes toward science. A sample of students in each junior high school completed an evaluation form at the end of the school year (see Table H5). Totally, almost 300 students completed the evaluation form. According to the evaluation, almost every student enjoyed doing experiments in the lab, while over 90% indicated that they wished they could visit the lab more often and that the experiments improved their understanding of science concepts. In addition, eighty-five percent felt that they enjoyed science more this year because of the science lab experience, though only about half of the students felt that science was their favorite subject. In the opinion of these students, the science program has been successful at turning students on to science.

An underlying goal of the Chapter 636 science programs was to enhance integration by providing regular opportunities for students to work together in groups on various investigations. While the science programs were only one of many programs in the schools, they may have had some effect on integration. As in previous years, a sociogram was administered to students in all elementary schools as a measure of integration. Sociogram results for schools with elementary science programs indicate that the cross-racial selection rate, totally, increased slightly this year compared to last year (see Table H6). However, only two of the five schools had an increased CRS rate this year.

Classroom teachers at schools with elementary science programs were asked to evaluate how successful they felt the programs were at accomplishing certain objectives using a seven-point rating scale from 1 (very UNsuccessful) to 7 (highly successful). Average objective ratings by school ranged from 3.86 to 6.9 (see Table H7). Totally, ratings on all six objectives exceeded 5 (good). Most successful objectives, according to teachers,were increasing student interest and enthusiasm for science and improving student understanding of science concepts, while least successful objective was providing teachers with new teaching ideas in science.

Teacher comments were generally positive, as evidenced by the following comments, though there was some concern at one school with the level of teacher input or involvement in the program.

Classroom Teacher Comments: Science Programs

> "Much enthusiasm is evident among both teacher and students in this program."
>
> "A worthwhile project!"
>
> "This program has given all students the opportunity for some hands-on experience in seeing the ways some of the principles of science work. Students have worked well together bringing friendship and unity to the lab."
>
> "There are still some "kinks" to work out in the program. Seating plans (promoting integration) will be used from the beginning next year to "increase the tendency for students to form cross-racial friendships. But, for the first year of a program, the 'science lab' was very successful!"
>
> "This is an excellent program and should be encouraged in other schools."
>
> "Program should definitely be retained."
>
> "Children learn science concepts more effectively through science experiments with appropriate follow up reading, etc."
>
> "Program is invaluable for providing teachers with new ideas, materials, and techniques! Enthusiasm and motivation are increased!"
>
> "I am sorry that the group/staff voted for another area instead of science for next year. I felt that this program was very beneficial to the children. The children enjoyed researching, writing reports, and working together on projects for the Science Fair."
>
> "This is an excellent program, mainly due to the enthusiasm of the teacher."
>
> "The teacher did a wonderful job with the science program. The children enjoyed having her come in each week, as well as I did.

"I feel this program is very beneficial for the students."

"Children were enthusiastic about learning science. It might have been improved through cooperative planning for hands on investigations and activities."

"The time for science is too short."

"Students seemed turned-off by 636 science. Classroom teacher imput to programs was not carried out."

"The reason I wanted this program was to get help with the investigations; I did not receive this assistance."

Recommendations

Science achievement gains at the seventh grade level was far below expectations. The use of a newly initiated test and the Spring-Spring testing achedule with different levels of the test from year to year might be factors, though it is also possible that the science lab program or the seventh grade program of study in science is deficient. Perhaps a review of the science lab program and curriculum at this level should be undertaken by the secondary science curriculum committee to ensure that the lab program and curriculum reflect the ever changing world of science and technology.

TABLE H1

Metropolitan Science Achievement Test Results

Chapter 636 Science Programs

School	Gr.	N	Level, Form Pre	Level, Form Pst	Scale Score Pre	Scale Score Pst	Scale Score Dif	Grade Equivalent Pre	Grade Equivalent Pst	Grade Equivalent Dif	Grade Equivalent (Exp)	Percentile Rank Pre	Percentile Rank Pst	Percentile Rank Dif	Normal Curve Equivalent Pre	Normal Curve Equivalent Pst	Normal Curve Equivalent Dif	Percent Improved ≥ Exp
Dor	4	28	ELEJS	ELEJS	551	629	+78	3.9	5.6	+1.7*	(0.6)	50	60	+10	50.0	55.3	+5.3	79%
Kns	4	67	ELEJS	ELEJS	561	646	+85	4.1	6.0	+1.9*	(0.6)	54	66	+12	52.1	58.7	+6.6	81%
Pot	4	79	ELEJS	ELEJS	538	593	+55	3.7	4.8	+1.1*	(0.6)	46	48	+ 2	47.9	48.9	+1.0	65%
Whi	4	37	ELEJS	ELEJS	594	664	+70	4.8	6.4	+1.6*	(0.6)	64	70	+ 6	57.5	61.0	+2.5	78%
New	5	239	ELEJS	INTJS	599	625	+26	4.9	5.5	+0.6	(1.0)	50	44	- 6	50.0	46.8	-3.2	40%
New	6																	
Che	7	169	INTJS	ADVJS	678	694	+16	6.9	7.3	+0.4	(1.0)	50	48	- 2	50.0	48.9	-1.1	34%
Dug	7	157	INTJS	ADVJS	683	688	+ 5	7.0	7.2	+0.2	(1.0)	52	46	- 6	51.1	47.9	-3.2	36%
For	7	213	INTJS	ADVJS	692	704	+12	7.3	7.6	+0.3	(1.0)	54	50	- 4	52.1	50.0	-2.1	36%
Total	4	211	ELEJS	ELEJS	557	627	+70	4.0	5.5	+1.5*	(0.6)	52	60	+ 8	51.1	55.3	+4.2	74%
	5	239	ELEJS	INTJS	599	625	+26	4.9	5.5	+0.6	(1.0)	50	44	- 6	50.0	46.8	-3.2	40%
	6																	
	7	539	INTJS	ADVJS	685	697	+12	7.1	7.4	+0.3	(1.0)	52	48	- 4	51.1	48.9	-2.2	35%
Total	4-7	989	----	----	---	---	---	---	---	+0.6	(0.9)	52	50	- 2	51.1	50.0	-1.1	45%

*GE gain ≥ month/month

TABLE H2

Ratios of Obtained to Expected Grade Equivalent Gains

Chapter 636 Total School Science Programs

Seven-Year Comparison

Year	Ratio
1978-79	1.14
1979-80	1.57
1980-81	1.86
1981-82	1.63
1982-83	1.86
1983-84	1.29
1984-85	0.67

TABLE H3

Mean NCE Change

Chapter 636 Total School Science Programs

Seven-Year Comparison

Year	Mean NCE Change
1978-79	+1.5
1979-80	+3.2
1980-81	+3.7
1981-82	+2.1
1982-83	+3.8
1983-84	+1.0
1984-85	-1.1

TABLE H4

Percent of Students Attaining Month-for-Month Gain
Chapter 636 Science Programs
Six-Year Comparison

Year	%
1979-80	54%
1980-81	60%
1981-82	59%
1982-83	63%
1983-84	62%
1984-85	45%

TABLE H5

Student Perceptions of Secondary Science Lab Programs

	Percent "Strongly Agree" or "Agree"			
N=	95	97	101	293
Statement	Che	Dug	For	Total
1. I enjoyed doing experiments in the science lab.	96%	98%	98%	97%
2. The experiments I did in the science lab helped me to better understand science concepts.	91%	92%	96%	93%
3. I enjoyed science more this year because of the science lab.	82%	85%	89%	85%
4. I wish that we could visit the science lab more often.	96%	94%	97%	96%
5. Science is one of my favorite subjects in school.	60%	63%	46%	56%
6. I would like to work in the field of science when I get older.	34%	37%	35%	35%
7. I like to tell my friends about the things we do in science lab.	65%	68%	78%	71%

TABLE H6

Average Cross-Racial Selection Rates
Schools with Chapter 636 Science Programs
1983-84 Compared to 1984-85

School	Percentage of Selections That Were Cross-Racial 1983-84	1984-85
Dor	53%	47%
Kns	58%	56%
New	41%	37%
Pot	43%	50%*
Sum	41%	49%*
Whi	44%	44%
Total	43%	44%

*CRS rate for 1984-85 > CRS rate for 1983-84

TABLE H7

Classroom Teacher Perceptions of Chapter 636 Science Programs

Success Rating of Objectives

Seven-Point Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

	Objective	Mean Success Rating									
		N=* 9	16	14	21	13	13	12	10	6	114
		Dor	Kns	New	Fot	Sum	Whi	Che	Dug	For	Total
1.	Improving student understanding of science concepts	6.56	6.94	6.21	5.05	5.08	6.85	6.08	5.90	5.83	6.01
2.	Increasing student interest and enthusiasm for science	6.56	6.88	6.38	5.10	5.00	6.92	6.08	5.80	6.50	6.05
3.	Enhancing student self-esteem as a result of more successful experiences in science	6.56	6.56	6.31	4.76	4.92	6.77	6.00	5.60	5.83	5.85
4.	Increasing the tendency for students to form cross-racial friendships by providing students with opportunities to work together in integrated groups	6.22	5.93	5.85	5.14	5.33	6.33	5.92	5.40	5.67	5.71
5.	Improving the ability of students to work together cooperatively	6.33	6.27	6.08	5.10	5.33	6.54	5.92	5.80	5.67	5.85
6.	Providing teachers with new teaching ideas or techniques in science	6.44	6.56	6.00	3.86	4.67	6.62	5.64	5.60	6.60	5.59

*Not all teachers responded to each item

I. Program Evaluation: Staff/Curriculum Development Workshop Programs

During the 1984-85 school year, Springfield was able to provide for staff and curriculum development on a competitive basis throughout the city. This was made possible through Chapter 636 monies received after August, 1984. The sum of $60,000 was proposed by administration for this project. By June 30, approximately $57,101 had been expended for teachers' salaries, consultant fees and for materials to implement the proposals which had been submitted for review and approval.

Staff develpment workshop topics this year included art in the curriculum, Spanish language and culture, human development, word processing, computer literacy, physical education skills, study skills, substance abuse, multicultural story telling, cross-cultural writing, and science activities. Curriculum development workshops covered a broad range of subject areas including telecommunications, word processing, science, engineering, TBE, study skills, social studies, parenting, and elementary math.

Evaluations of the workshops were very positive indicating that staff & curriculum projects are viewed as successful ways of involving faculties in examining individual school needs and then planning for ways of meeting those needs. This type of activity also affords the individual teacher, parent or principal the opportunity to propose, present and develop an idea with the clear hope that a review committee will recommend funding for it. It encourages creative thinking and planning! Several teachers have indicated that it should be repeated again if monies are available.

Objectives of staff development workshops were that 80% or more of participating teachers would learn new skills, that they would implement what they learned in their classrooms, and that the newly learned skills would better enable teachers to meet the needs of students in desegregated classrooms. According to perceptions of teachers who participated in the staff development workshops, these objectives were met.

As indicated in Table I1, more than 90 percent of the participants felt that the information obtained was valuable, that they would utilize the knowledge gained, that what they learned would help them to better meet the needs of students in integrated classrooms, and that the objectives of the workshops were successfully accomplished.

Individually, in fourteen of the workshops, teachers were unanimous in their agreement on the five items, and, in only a few instances, did less than 80% of the teachers show agreement on each item.

Overall perceptions of workshop participants this year were comparable to those of previous years (see Table I2). Biggest change from last year was on item three as 95% of the teachers felt that the knowledge gained would help them to better meet the needs of students in integrated classrooms compared to 89% last year. This figure was the highest percentage yet.

Participants in the staff devlopment workshops also rated the overall success of each workshop on a seven point scale (from 1: Very Unsuccessful to 7 Highly Successful). As shown in Table I3, average rating was better than 5 on a 7 point scale. Ratings for all but three were above 5.0. The least successful workhops, according to the teachers, were the study skills workshops. Participants in these workshops felt rushed, as the workshops came at the very end of the school year. There apparently was also much disagreement among the participants as to how to encourage better study habits with little success in coming up with agreeable solutions. Participants also felt that guidance counselors and administration should have been involved in the workshops.

Compared to previous years, teacher overall ratings of the staff development workshop programs were the lowest ever though still a respectable rating (see Table I4).

Primary objective of the curriculum development workshops was that the new curriculum would be more relevant for students. Some workshops also hoped to revise curriculum to make certain programs more attractive to certain target populations or to effect improved communication and cooperation between teachers from different high schools. Many of the curriculum development workshops conducted this year were part of the long range planning submitted by academic and creative arts supervisors for the new high school program and for Putnam and Commerce.

Participants in the Chapter 636 currciulum development workshops, in which the participants themselves discuss and write or revise curriculum, were asked to respond to five questions concerning the workshop and the resulting curriculum:

1. What were the objectives of this curriculum development workshop?
2. What kinds of instructional changes do you feel might take place as a result of the new curriculum?
3. What impact do you anticipate these changes might have on students or teachers?
4. How is the new curriculum an improvement over that previously used?
5. What impact will the new curriculum have on integration of students?

A composite of teacher responses to the five questions for the various curriculum development workshops is presented below.

A. Commerce English Examination

1. Objectives:
    a. Review goals and objectives of the English program in grades 10-12; all levels.
    b. Write examination guidelines, based on goals and objectives.
2. Instructional Changes:
    a. Teacher will follow course of study more closely.
    b. Students will keep notebooks.
    c. Teachers reviewing methods will be changed.
    d. Greater uniformity in exams.
3. Impact on Students:
    a. Better study habits.
    b. Greater understanding

4. Improvement?:
   a. Greater clarity.
   b. More definite guidelines for teachers.
5. Integration:
   a. Enhanced CP program will encourage more boys and non-minority students to attend Commerce.
   b. Improved student performance, resulting from better methods of preparation and review, will bring about a feeling of accomplishment and pride.

B. Commerce Word Processing

1. Objectives:
   a. To develop behavioral objectives for the word processing course.
   b. To develop an up-to-date curriculum guide with appropriate exercises for use on Commerce equipment.
   c. To develop testing criteria.
   d. To develop instructional units for career development in this area.
2. Instructional Changes:
   a. More efficient use of class time.
   b. Greater attention to student needs.
   c. More realistic goals for students to accomplish.
3. Impact on Students:
   a. Teacher will be able to devote more time to less able students.
   b. Greater awareness of career possibilities.
   c. Students will become more self-reliant and will be able to progress at their own pace.
4. Improvement?:
   a. Better time management.
   b. Less frustration for the student who needs immediate assistance.
   c. More in-depth experience on the various pieces of equipment.
   d. Students will accomplish more.
   e. Covers the newest equipment available at Commerce.
5. Integration:
   a. Program will be attractive to more male students.

C. Elementary Math

1. Objectives:

a. To identify appropriate mathematical concepts to be taught at each grade level in all schools.

b. To produce a new curriculum guide for elementary teachers which gives objectives and examples for instruction.

c. To generate more uniformity in math instruction throughout the city.

2. Instructional Changes:

a. Students will be more appropriately grouped through use of an improved placement test.

b. Teachers will have a clearer understanding of what is expected to be taught.

c. More interesting and relevant program for teachers and students.

d. More uniform math instruction.

3. Impact on Students:

a. Better preparation for the future.

b. Greater understanding of mathematical concepts.

c. Better placement in math groupings.

d. Continuity of student progress both within a school and throughout the system.

4. Improvement?:

a. Objectives listed in two ways: grouped by topic and suggested sequence.

b. More comprehensible, more readable, better organized.

c. Includes many new topics.

d. Streamlined testing and record keeping.

5. Integration:

a. Insures consistent development of mathematics as children move from grade to grade and school to school within the system.

b. Academic progress and self esteem of all students should be improved.

c. Objectives allow students to work together in groups, sharing ideas.

D. High School Engineering Laboratory

1. Objectives:

   a. To create a new course of study for the Engineering Laboratory program at Central High School.

   b. To prepare specifications for instructional equipment to be used in the program.

2. Instructional Changes:

   Math, physics, and chemistry teachers will now be able to relate their subject matter to practical situations.

3. Impact on Students:

   a. Promote creative thinking and provide a "hands-on" experience for novel approaches to scientific and technical problems.

   b. Will provide students with an opportunity to explore the various aspects of engineering before they make a college commitment.

4. Improvement?:

   a. No course in engineering previous existed.

   b. Will provide college bound student a chance to do something with their hands.

5. Integration:

   Integration will be increased because of the cooperative nature of this course. Students will have to recruit the help of others in the class.

E. Junior High School Science

1. Objectives:

   a. To revise the junior high school curriculum.

   b. To provide more continuity in science and delete repetition in the science program.

2. Instructional Changes:

   a. The instructor will be able to develop concepts and build on these concepts with better understanding.

   b. More relevant material will be presented.

   c. More time for labs and hands-on activities.

   d. More uniformity of instruction from school to school.

3. Impact on Students:
    a. Better understanding of science concepts.
    b. More laboratory experiences for students.
4. Improvement?:
    a. Less duplication of topics.
    b. More topics can be covered in greater depth.
    c. More time for labs.
5. Integration:

    More lab experiences, done in groups of two or more students will increase integration.

F. Kennedy Science

1. Objectives:
    a. To design a curriculum to better meet the needs of students reading two or more years below grade level.
    b. To create worksheets, labs, and demonstrations to enrich the curriculum for these students.
2. Instructional Changes:
    a. Instruction will advance at a slower pace.
    b. Less emphasis will be made on certain areas of science.
    c. Smaller units of work.
3. Impact on Students:
    a. Less frustration and greater feeling of success.
    b. Greater understanding.
    c. Greater interest and more active participation.
    d. Hands on demonstration and experiments will stimulate students' curiosity.
4. Improvement?:
    a. Designed to better meet the needs of students with severe reading comprehension problems.
    b. Less wasted time in class.

5. Integration:

   a. Lab activities will lead to greater interaction.

   b. Greater success will lead to better self-image.

G. Kiley Study Skills

1. Objectives:

   To prepare a curriculum to teach study skills and responsibility to seventh graders in order to ease their integration into junior high school and make them more successful.

2. Instructional Changes:

   Central skills will be reinforced in each class rather than sporadically.

3. Impact on Students:

   a. Students should develop improved listening skills, attentiveness, and concentration.

   b. Students will be better able to follow directions and will be more prepared for class.

4. Improvement?:

   A totally new concept-there never before has been a curriculum designed specifically to ease the transition of students into grade seven.

H. Parenting

1. Objectives:

   a. To devise a course of study at Tech for the home management (parenting seminar), a curriculum relative to students at Tech who are currently parents.

   b. To create a resource center to assist teenage parents in using the community resources which will help them to become better parents and citizens.

2. Instructional Changes:

   A team teaching approach will be used, crossing several areas of discipline, focusing on anatomy,feelings,and responses typical of teenage parents.

3. Impact on Students:

   a. Improved attendance and grades.

b. Improved attitudes and behavior, hopefully to help students become better parents.

4. Improvement?:

Offers more contemporary information in the area of physiology, anatomy, reproduction, child care, psychology, interpersonal relationships, parenting, and finance.

5. Integration:

Course will allow discussion of the problems of parenting faced by people of all races and ethnic groups.

I. Putnam Competency

1. Objectives:

a. To develop a competency profile for all shops for evaluation of all students.

b. To update present curriculum and include progress record charts.

2. Instructional Changes:

a. More individualized instruction.

b. Closer observance of student progress.

c. Greater uniformity in approach.

3. Impact on Students:

a. Increase in student shop skills.

b. More advanced students will be able to progress at a faster rate without getting bored. Slower students will be able to better grasp knowledge at their own pace.

4. Improvement?:

a. Less wordy, easier to use.

b. Encourages the latest methods utilized in each area.

c. Provides for a record of student experience, a measure of their ability and rate of progress, giving a clearer picture of each student's performance and abilities.

5. Integration:

Will create opportunities for more individualized shop instruction, decreasing the disparity in shop skill achievement levels between white and minority students.

J. Science Equipment Planning

1. Objective:

To continue to develop and build teacher demonstration units and student experiment units for the Central High School program in Physical Science, Physics, Chemistry, and Biology.

2. Instructional Changes:

a. Teachers will utilize fully equipped laboratories with all necessary science equipment to conduct demonstrations and student experiments.

b. Greater variety of labs possible.

3. Impact on Students

a. Students will be more inclined to want to "think-out" scientific investigations.

b. Students will participate more in class discussions and activities.

c. Greater interest.

d. Students will be able to move at their own speed.

4. Improvement?:

a. Introduction of computer enhanced demo and lab work.

b. More up-to-date technology.

c. Increased hands on experiences.

5. Integration:

a. Program will provide for a greater range of student abilities.

b. Program emphasizes lab work with different lab partners or groups, a natural for integration.

K. Sumner Social Studies

1. Objectives:

a. To upgrade the social studies multicultural curriculum at Sumner Avenue School.

b. To develop specific team teaching activities to enhance integration.

2. Instructional Changes:

a. Teachers will utilize more activity-centered projects relating to studies of countries around the world.

b. More and improved materials and new ideas.

c. More sharing of ideas and materials among teachers.

3. Impact on Students:
    a. Students will work closely with other students and increase the cross-racial friendships.
    b. More interest in the background of other students and cultures.
    c. More understanding of other cultures.
    d. Increased motivation.
4. Improvement?:
    a. More in-depth study in each area.
    b. More sharing of ideas and team-teaching.
    c. Inclusion of more cultures.
    d. Availability of more materials and resources.
5. Integration:
    a. Activity-centered prospects afford opportunities for students to work together.
    b. Sharing of cultures enhances understanding and effects more cross-racial/ethnic friendships.

L. TBE Curriculum
1. Objectives:
    a. To review existing and projects afford opportunities for students to level.
    b. To identify and integrate cultural components into each academic area.
    c. To review materials published in English for use in academic areas.
    d. To prepare a guide for use at Central High School.
2. Instructional Changes:
    a. Greater understanding and sensitivity as to what bilingual education is all about.
    b. It will be easier to integrate and relate the historical and cultural aspects of Hispanic children to any area of study by any teacher.
    c. Courses in Puerto Rican/Hispanic literature and history for bilingual program students and mainstream students will be implemented.
3. Impact on Studnets:
    a. Because of a sound, strong bilingual program, students will develop

a more positive attitude toward school.

b. Greater sharing and openess between Anglo and Hispanic students.

c. Increased participation of bilingual program students in all activities of high school.

d. Higher achievement of bilingual students upon exit to the mainstream.

e. Full participation in the science laboratory program for bilingual students.

4. Improvement?:

a. A more complete program.

b. New program will provide bilingual students with equal access to all of the high school programs in Springfield.

c. Greater strength will be given to the native language component of the bilingual program.

d. Emphasis on the science laboratories as an integral part of the bilingual program.

5. Integration:

a. Better understanding and increased sensitivity toward bilingual education and the need for it.

b. Improved understanding of Puerto Ricans and their culture.

c. Increased participation of bilingual students in all school activities.

d. Improved self-esteem of bilingual students.

M. Technical-Vocational Science

1. Objectives:

To develop a curriculum specifically suited to the academic ability of the average student at Putnam, providing a thorough understanding of the basic principles of health and physical science, utilizing a hands-on laboratory approach.

2. Instructional Changes:

a. Increase in "hands-on" learning, ie. student labs and demonstrations.

b. Teachers will utilize more teaching tools, ie. labs, demonstrations, films, study kits.

3. Impact on Students:

a. Less boredom and acting out in class.

b. More interest in the subject area.

c. Greater understanding of science concepts.

4. Improvement?:

a. Previous curriculum was book oriented-this is more hands-on, experiential-oriented.

b. Program will be more interesting and exciting for both teacher and student.

5. Integration:

a. Laboratory type atmosphere will generate sharing of ideas.

b. Students will work together in integrated groups, in a more relaxed, less rigid environment, interacting with one another in cooperative efforts.

N. Telecommunications

1. Objectives:

a. To research, learn, and write curriculum and activity suggestions for the use of the telecommunications career center.

b. To provide lists of available materials for instruction and make recommendations for purchase.

2. Instructional Changes:

a. Teachers will become involved in video production.

b. Interdisciplinary projects will be possible.

c. Student produced television programs can be shared with the entire school, other schools, and community.

3. Impact on Students:

a. Rather than reading about media, students will be able to participate in the creative process and to learn from personal experience.

b. The activity-oriented approach will provide personal relationship skills in working in a cooperative way for a common goal.

c. Students will develop skills in critical viewing, writing, editing, and video production.

4. Improvement?:

a. More in-depth course of study in video production.

b. These are several options to accomodate students with TV, film, and journalism interests.

5. Integration:
    a. Participating students work together in a natural, productive manner toward a common goal: the completion of a television program.
    b. The viewing audience will become aware of the talents of all students in the program.
    c. The diversity of roles allows students to learn each person's strengths and weaknesses.

Composite analysis of the above capsule summaries indicates that the new curriculum should, as expected, have greater relevance to the present student population. The new curriculum should generate greater interest and achievement and better preparation for our future society. Finally, the new curriculum is generally more comprehensive, more demanding, and more adaptable to varying student needs and ability levels, and encourages greater integration.

TABLE 11

Workshop Participants' Perceptions of

Chapter 636 Staff Development Workshop Programs

Percent of Responses "Strongly Agree" or "Agree"

	Workshop Title	N*	1. The information I obtained in the workshops was valuable to me.	2. I have utilized or plan to utilize, in my work with youngsters, the knowledge gained in these workshops.	3. Knowledge gained in these workshops will help me to better meet the needs of youngsters in integrated classrooms.	4. I gained from these workshops what I expected to gain.	5. The objectives of this workshop were successfully accomplished.
1.	Brightwood Computer Training - 1	11	91%	91%	91%	91%	91%
2.	Brightwood Computer Training - 2	5	100%	75%	100%	100%	100%
3.	Brunton Physical Education	11	91%	100%	91%	73%	91%
4.	Cambridge Rindge & Latin	10	100%	100%	90%	100%	100%
5.	Classical Study Skills	7	71%	86%	86%	86%	57%
6.	Commerce Word Processing	8	100%	100%	100%	88%	88%
7.	Duggan Study Skills - 1	7	57%	57%	67%	71%	43%
8.	Duggan Study Skills - 2	7	86%	83%	71%	57%	57%
9.	Elementary Science	16	100%	100%	100%	100%	100%
10.	Foreign Language Oral Proficiency	19	100%	100%	100%	100%	100%
11.	Forest Park Problem Solving	7	100%	100%	100%	100%	100%
12.	Glenwood Language & Art	5	100%	100%	100%	75%	80%
13.	I. O. E. TESA	10	100%	100%	100%	100%	100%
14.	Kennedy Art	9	100%	100%	100%	100%	100%
15.	Kiley Computer Training	10	100%	100%	100%	100%	100%
16.	Kindergarten	25	100%	100%	96%	100%	100%
17.	Lynch TBE	17	100%	100%	100%	100%	100%
18.	Pottenger Writing Process	6	100%	100%	100%	100%	100%
19.	Secondary Guidance	14	100%	100%	93%	71%	79%
20.	Sixteen Acres Computer Training	10	100%	100%	90%	100%	100%
21.	Sixteen Acres Cross-Cultural	11	90%	90%	82%	90%	90%
22.	Sixteen Acres Storytelling/Multicultural	10	100%	100%	100%	100%	100%
23.	Spanish Conversation/Culture	13	92%	92%	92%	77%	77%
24.	Substance Abuse	12	100%	100%	100%	100%	100%
25.	Talmadge Physical Education	11	100%	100%	100%	100%	100%
26.	Talmadge Reading	9	100%	100%	100%	78%	78%
27.	Teaching Human Development	7	100%	100%	100%	100%	100%
28.	Van Sickle Computer	6	100%	100%	100%	80%	83%
29.	White Street Computer Training	14	100%	100%	100%	100%	100%
30.	Women In History	6	100%	100%	100%	100%	100%
	TOTAL	313	97%	96%	95%	92%	92%

*Not all participants responded to each item.

TABLE I2

Workshop Participants' Perceptions of

Chapter 636 Staff Development Workshop Programs

Percent of Responses "Strongly Agree" or "Agree"

Seven-Year Comparison

					Year			
	N=	229	229	162	96	25	98	313
	Statement	78-79	79-80	80-81	81-82	82-83	83-84	84-85
1.	The information I obtained in the workshops was valuable to me.	92%	98%	97%	99%	96%	99%	97%
2.	I have utilized or plan to utilize in my work with youngsters, the knowledge gained in these workshops.	95%	97%	99%	98%	96%	94%	96%
3.	Knowledge gained in these workshops will help me to better meet the needs of youngsters in integrated classrooms.	86%	93%	94%	90%	92%	89%	95%
4.	I gained from these workshops what I expected to gain.	88%	91%	86%	92%	92%	94%	92%
5.	The objectives of this workshop were successfully accomplished.	90%	93%	94%	98%	96%	94%	92%

TABLE I3

Workshop Participants' Overall Ratings of Chapter 636 Staff Development Workshop Programs

Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

	Workshop Title	N	Mean Rating
1.	Brightwood Computer Training - 1	11	6.36
2.	Brightwood Computer Training - 2	5	6.40
3.	Brunton Physical Education	11	5.09
4.	Cambridge Rindge & Latin	10	5.80
5.	Classical Study Skills	7	4.43
6.	Commerce Word Processing	8	5.75
7.	Duggan Study Skills - 1	7	4.00
8.	Duggan Study Skills - 2	7	3.71
9.	Elementary Science	16	6.38
10.	Foreign Language Oral Proficiency	19	6.47
11.	Forest Park Problem Solving	7	6.14
12.	Glenwood Language & Art	5	5.80
13.	I. O. E. TESA	10	6.50
14.	Kennedy Art	9	6.22
15.	Kiley Computer Training	10	6.70
16.	Kindergarten	25	6.32
17.	Lynch TBE	17	6.29
18.	Pottenger Writing Process	6	6.67
19.	Secondary Guidance	14	5.21
20.	Sixteen Acres Computer Training	10	6.80
21.	Sixteen Acres Cross-Cultural	10	6.10
22.	Sixteen Acres Storytelling/Multicultural	10	7.00
23.	Spanish Conversation/Culture	13	5.85
24.	Substance Abuse	12	6.75
25.	Talmadge Physical Education	11	6.73
26.	Talmadge Reading	8	5.25
27.	Teaching Human Development	7	6.71
28.	Van Sickle Computer	6	5.33
29.	White Street Computer Training	14	5.79
30.	Women In History	6	6.17
	TOTAL	311	5.43

TABLE I4

Workshop Participants' Overall Ratings of

Chapter 636 Staff Development Workshop Programs

Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

Seven-Year Comparison

Year	N	Mean Overall Rating
1978-79	229	5.67
1979-80	229	6.16
1980-81	162	5.81
1981-82	95	5.95
1982-83	25	5.88
1983-84	98	6.08
1984-85	311	5.43

J. SPECIAL REPORT: Integration

An underlying objective of the Six-District Desegregation Plan, in general, and of Chapter 636 Programs, in particular, is to increase racial/ethnic integration City staff as well as Chapter 636 teachers in all program areas are aware of this objective and continually provide opportunities for students that will enhance integration. According to Chapter 636 teachers, the most frequently utilized techniques for enhancing integration this year were providing opportunities for students to work together in small groups, involving students in decision-making, and rearranging seating or work groups (see Table J1). Least utilized techniques were integrated field trips, developing new multicultural curriculum or units of study, or increasing staff awareness in multicultural areas.

In the opinion of this evaluator, and based on data from previous years, Chapter 636 programs can be very helpful at increasing integration. Several of the integration techniques listed in Table J1, however, were utilized by fewer than half of the Chapter 636 teachers. In order to continue to maintain progress in integration it would seem to be important that more Chapter 636 teachers make use of integration techniques such as teaching multicultural units of study, integrated field trip experiences, viewing multicultural performances or programs, involving white and minority parents in school activities, increasing staff awareness in multicultural areas, and preparing special activities for different ethnic holidays, those techniques listed by fewer than 50% if the teachers.

In order to assess the impact of the Six-District Desegregation Plan, and Chapter 636 Programs on integration, a locally developed sociometric instrument has been administered twice each year (Fall, Spring) to some third, all fourth, and some fifth and sixth grade students in all elementary schools. The instrument was personally administered by this evaluator twice this year to over 3000 students across the city.

The sociometric instrument is essentially an unobtrusive measure of integration. Students were asked to select one student from the class in response to each of seven questions:

1. Which classmate would you choose to work on a school project with?
2. Whom would you choose to eat lunch with?
3. Which classmate would you pair up with to go on a field trip?
4. Which student do you most like to play games with?
5. What student would you most like to have sit near you in school?
6. Who is your newest friend in the classroom?
7. Whom would you choose to come to your home for a party?

Following each administration of the instrument, the number and rate of cross-racial selections (selection of students of a different race from the selector) are tabulated by computer and results are forwarded to teachers and principals, usually with 48 hours. The report for teachers consists of a matrix of students with their selections for each question, a listing of the number of cross-racial selections made by each student, a listing of the number of times that each student was selected (to identify isolates and more popular students), a detailed analysis of the number and rate of cross-racial selections made by each race and sex subgroups in the classroom compared to the number and rate you would expect if selections made had been totally random, information regarding possible "problem" areas in integration as determined by statistically significant differences ($p < .01$) between the actual cross-racial selections made and those that would be expected if selections were totally random, and finally (new this year) a listing of the cross-racial selection rate by each question or activity area to determine which activities generate greater cross-racial selecting. The report for principals consists of a summary analysis for each classroom and for the building as well as a progress report for the building over time. Data is also compiled systemwide and reported annually in the Chapter 636 Evaluation Report.

According to systemwide analysis of sociometric data, the cross-racial selection rate at each grade level, by each racial/ethnic subgroup, and by both sex subgroups has consistently increased over the past seven years (14 testing periods). This, perhaps, can be best observed in Graph J1. These graphs, in the opinion of this evaluator, present a true objective profile on the continuing progress in integration being accomplished in the Springfield Public Schools.

The actual percent of selections made that were cross-racial, totally, by each race/sex subgroup in each of fourteen testing periods is given in Table J2. This year, on both the fall and spring testings, the mean cross-racial selection rate was at its highest level ever with the greatest improvement coming at the lower elementary level. Totally, on the most recent testing, 44% of all student selections were cross-racial compared to only 30% seven years ago, giving an average improvement rate of approximately two percentage points each year. Rates for white, non-white, and Hispanic students increased this year, as did rates for both sex subgroups. Only non-white girls and Hispanic boys had slightly lower cross-racial selection rates this year compared to last year. As in previous years, non-white boys recorded the highest cross-racial selection rate.

Cross-racial selection rates by grade level for each race-sex subgroup for six years is presented in Tables J3 and J4. Cross-racial selection rates for all subgroups at the grade 3-4 level were higher this year than last year with the exception of white boys, non-white girls, and Hispanic boys. Greatest increase this year was by non-white boys as almost two-thirds of their selections were cross-racial. Largest decline in cross-racial selection rate at this level was by Hispanic boys.

On the upper elementary level, CRS rates for all subgroups except Hispanic girls were higher this year than last year. Greatest increase this year was by Hispanic boys (who also recorded the highest CRS rate of any subgroup). Greatest decline, however, was recorded by Hispanic girls.

Average cross-racial selection rates for each race-sex subgroup by grade level and totally over six years is presented in Table J5. Average CRS rate for the lower elementary level exceeds that for the upper elementary level by 2.4 points. Average CRS rate is highest for non-white boys at each grade level and totally, while white students, both boys and girls, continue to maintain the lowest average CRS rate.

The computer analysis of sociograms was expanded this year to enable computation of cross-racial selection rates by question or activity. As presented in Table J6, the highest cross-racial selection rate was recorded on the new-friend question, as more than half of the selections made on this item were cross-racial. This is important, in the opinion of this evaluator, as only by promoting new cross-racial friendships now, will integration continue to improve in future years. The school activity which promotes the greatest natural cross-racial selecting appears to be "games", and thus this activity should be heavily promoted in elementary school classrooms. The school activities with the least "natural" cross-racial selecting and significantly lower cross-racial selections than "games" were "field trips" and "lunch." Perhaps teachers, by being more directive in forming mixed race/ethnic pairs of students for field trips and for lunch partners, will then encourage more "natural" selecting by students in this area.

Each school activity and new friend question had higher CRS rates than the "party" question, indicating that students are less inclined to bring home students of a different race or ethnic group. However, by continually providing opportunities in classrooms for students to become more comfortable with one another, through student and/or teacher initiated groupings, hopefully students will become more willing to invite home their clasmates who differ from them by race or ethnicity.

As a result of our present computer analysis, it is possible to compare the actual rate of cross-racial selections which occurred to that which could be expected if students selected totally at random based upon the racial distribution of the classrooms. The ratio comparing the actual rate to the expected rate, of which a higher value represents better integration, is, in the opinion of this evaluator, a more equitable method for analyzing and comparing the effectiveness of integration between schools or groups as the ratio is being assessed based on the racial distribution of students available in the selection pool. Hence, there is no "penalty" for greater or lesser percentages of white or minority students in a classroom or school.

Steady increases in the ratio of actual to expected cross-racial selections, indicating that students are coming closer and closer to making cross-racial selections equal to the selection possibilities, can be seen visually in Graph J2. At both grade levels and by each race subgroup and sex subgroup there has been consistent gain in the ratio of actual to expected cross-racial selections.

Data concerning the ratios of actual to expected cross-racial selections by grade level and race-sex subgroups over the past five years is presented in Table J7. Totally, the ratio has increased to 0.69 from only 0.52 seven years ago indicating that students are making almost 70% of the cross-racial selections that we could expect by random selection compared to only about 50% in 1978.

Citywide, consistent increases in the ratio can be seen for each race-sex group, for whites, non-whites, and Hispanics, for both boys and girls, and at both the lower elementary and upper elementary levels. Greatest ratio change over last year was by non-white boys. Highest ratios ever were recorded by white girls, non-white boys and girls, Hispanic boys, whites, non-whites, Hispanic boys and grades 3-4 and 5-6. Note that a higher ratio was recorded by white students than by Hispanic students. Thus, although the CRS rate for whites was lower than that by Hispanics, white students came closer to selecting up to expectations than Hispanics, based upon the selection pool available to white students. Though improved over last year, Hispanics still remain a challenge for increasing cross-racial selections closer to expectation levels, as both Hispanic boys and girls had lower ratios than their white or non-white counterparts.

Results similar to the above can be seen for subgroups at both the lower elementary and upper elementary levels (see Table J9). On the lower elementary level, increased ratios were attained this year by all groups with the exception of Hispanic boys while white boys and girls and non-white boys recorded the highest ratios ever. The ratio for non-white boys at this grade level in the most recent testing, 0.88, was the highest ratio ever recorded for any subgroup and indicates that this subgroup is making sociogram selections with very little regard to race as the cross-racial selections made are almost equivalent to what could be purely random selection.

On the upper elementary level, higher ratios were recorded this year compared to last by all subgroups with the exception of Hispanic girls and the highest ratios ever recorded by all groups with the exception of Hispanic girls.

Averaged over 14 testing periods, non-white students at both grade levels and overall had the highest average ratio followed by white students and then Hispanic students, while boys at both grade levels and overall continue to have a higher ratio than girls (see Table J10).

Final comparisons by race-sex subgroups and grade level is given in Table J11. Here the slope of the regression lines for CRS rates and for ratios is presented, giving some idea as to the rate of change in percent or ratio over time. Most important, the slopes for every subgroup at both grade levels and totally, for both percent and ratio were positive indicating that the tendency for students of all groups and levels to form cross-racial friendships is increasing over time. Greatest rate of increase in percent is by white boys and non-white girls, both increasing at 1.29 percentage points per testing period. Lowest rate of increase in percent is for non-white boys and Hispanic girls. Rate of change in the ratio of actual to expected cross-racial selections is also highest among white boys and non-white girls and lowest for non-white boys and Hispanic girls. Rate of change at the upper elementary level in both percent and ratio, is somewhat higher than rate of change at the lower elementary level. Of the three racial/ethnic groups, Hispanics have the lowest rate of change. In particular, the rate of change in cross-racial selection percent for Hispanics at the lower elementary level is only 0.29, less than one-third of a percentage point per testing period and considerably below the rate of change for white or non-white students.

The data presented in the tables and graphs above is certainly very encouraging as students at the elementary level continue to make steady progress toward integration. Students of all racial groups are making more cross-racial selections now than ever before and are coming closer to making the number of cross-racial friendships that can be expected by chance. There is still room for improvement, however. Girls, particularly those on the upper elementary level, still have a much smaller tendency to formulate cross-racial friendships than boys. Some progress has been made in this area as evidenced by a high rate of change in percent and ratio by non-white girls, but efforts of teachers to encourage young girls to formulate friendships across racial lines need to continue. By making use of the results of the newest sociogram analysis, cross-racial selection rates by question, teachers will hopefully be encouraged to form mixed race/ethnic groups for school activities where students have less of a "natural" tendency to select cross-racially in order to encourage greater "natural" cross-racial selecting for these activities, perhaps by utilizing "new friend" selections whenever possible. And by promoting classroom activities in which students have the highest "natural" tendency to select cross-racially, teachers can also help to insure progress toward integration.

In Graph J3, the actual percentage of selections that were cross-racial at each elementary school over 14 testing periods is presented pictorially. Though there are up and down variations in each graph, 25 of the 30 schools have an increasing pattern of cross-racial selections over time, while the remaining five schools have a basically "flat" no-changing pattern rather than a decreasing pattern over time. At several schools (i.e. Armory, Beal, Brightwood, Brunton, Ells, Sixteen Acres, Warner) there was a considerable increase in cross-racial selection rate this year compared to last year, while at Beal and Brightwood, a period of declining cross-racial selection rates seems to have been reversed. Collectively, these graphs present a positive indication that our schools are becoming more and more integrated and perhaps at an increasing pace over the past few years.

Data presented in Graph J3 is presented in tabular form in Table J12. As seen there, 17 of 30 schools had higher CRS rates this year than last year, and 15 schools recorded their highest CRS rate ever this year while none of the schools recorded a lower rate than ever before. Average CRS rates by schools over the 14 testing periods ranged from 24.6 to 51.4 percent.

In Graph J4 the ratios of actual to expected cross-racial selections over 12 testing periods is shown. Again, despite occasional variations, there is a tendency toward ever increasing ratios over time at 29 of 30 schools. At several schools (i.e. Armory, Beal, Brunton, Glenwood, Kensington, Memorial, Talmadge) there was a considerable increase in ratio this year compared to last year. At Memorial School, the ratio exceeded 1.00 for the first time by any school, while at Glenwood and Kensington, the ratio came very close to 1.00. One particular success story that this evaluator would like to highlight is at Beal School which has, over the past two years, under the direction of a new principal, shown a turn around in both CRS rate and ratio. In the opinion of this evaluator, a lunch time homeroom competition program, initiated by this principal, has been a major factor in this change, as well as a building-wide commitment to improving integration as carried out by classroom teachers.

In Table J13, the results shown in Graph J4 are presented in tabular form along with average ratios over 14 testing periods. Ratios at 17 schools increased compared to lastyear while 15 schools recorded their highest ratio ever. Of particular note, was the large increase in ratio at Talmadge School, from 0.64 in the Fall to 0.89 in the Spring, the largest Fall to Spring gain ever recorded in seven years of sociometric testing, a tribute to the concerted efforts of the teachers of the two fourth grade classrooms that were tested.

Final analysis of the progress of integration by schools is presented in Table J14. In this table the rate of change over time in cross-racial percent and ratio of actual to expected cross-racial selections is shown by the slope of the regression line in each case. Twenty-five schools had a positive (increasing) rate of change in cross-racial percent with Brookings, DeBerry, Indian Orchard, and Kensington recording rates of change better than 2 percentage points per testing period. Twenty-nine schools had a positive rate of change in the ratio of actual to expected cross-racial selections with seven schools (Brookings, Brunton, DeBerry, Dorman, Indian Orchard, Lincoln, and Warner) recording rates of change better than two points per testing period.

Data presented in the above tables and graphs provides evidence that a tendency toward increased cross-racial friendships is the case at most elementary schools. Schools with decreasing or minimally changing cross-racial selection rates or ratios should consider formulating ways to increase formal or informal contacts between students of different social or ethnic groups through available staff and programs or by initiating new programs which could be effective at enhancing integration. In addition, the prinicipal and staff at these schools might want to assess the types of teaching techniques which are effective in enhancing integration (as presented in the booklet forwarded to all teachers two year ago: Teaching Strategies for Effective Integration) that are not being fully utilized in their buildings and may want to study more closely the results of their sociogram testing and plan certain activities to overcome any weak areas that are revealed.

Recommendations

1. Several effective integration techniques were utilized by fewer than half of the Chapter 636 teachers. In order to continue progress toward greater integration, a greater effort is needed by Chapter 636 teachers in making use of those integration techniques which include teaching minority group history or culture, developing new multicultural units of study, integrated field trip experiences, viewing multicultural performances, involving white and minority parents in school activities, increasing staff awareness in multicultural areas, and preparing special activities for different ethnic holidays. Perhaps inservice training in such techniques is warranted.
2. The school activity which promoted the greatest "natural" cross-racial selecting in most classrooms was games. Teachers should provide numerous opportunities for students to play educationally sound games, both outside and within the classroom, in order to encourage the development of cross-racial friendships.
3. School activities with the least tendency for "natural" cross-racial selecting were field trips and lunch. Teachers need to be more directive in these or other activities for which their students made fewer cross-racial selections (as indicated by sociogram results) by frequently forming mixed race/ethnic pairs of students for these activities.
4. Girls, particularly those on the upper elementary level, still have a much smaller tendency to select cross-racially than boys. Some progress has been made toward increasing this tendency, but efforts of teachers in this area must continue. It is recommended that teachers frequently utilize small group activities in their classrooms in order to provide opportunities for girls to form cross-racial friendships and to be directive in pairing up girls of different racial or ethnic groups.
5. While most schools have recorded a trend toward increased cross-racial selection rates or ratios of actual to expected cross-racial selections,

a few schools have minimal or negative change in one area or the other. Teachers at these schools, at the direction and encouragement of the principal, need to make a more concerted effort to increase available opportunities for student friendships to occur. This may be done by initiating programs which seem to be effective at enhancing integration, by analyzing which of the effective integration techniques are not being utilized with regularity and making changes accordingly, by studying more closely the results of sociogram testing and planning certain activities to overcome any weak areas that may be revealed, or by initiating and participating in staff development designed to improve teacher skills in this area.

TABLE J1

Integration Techniques Utilized by Chapter 636 Teachers

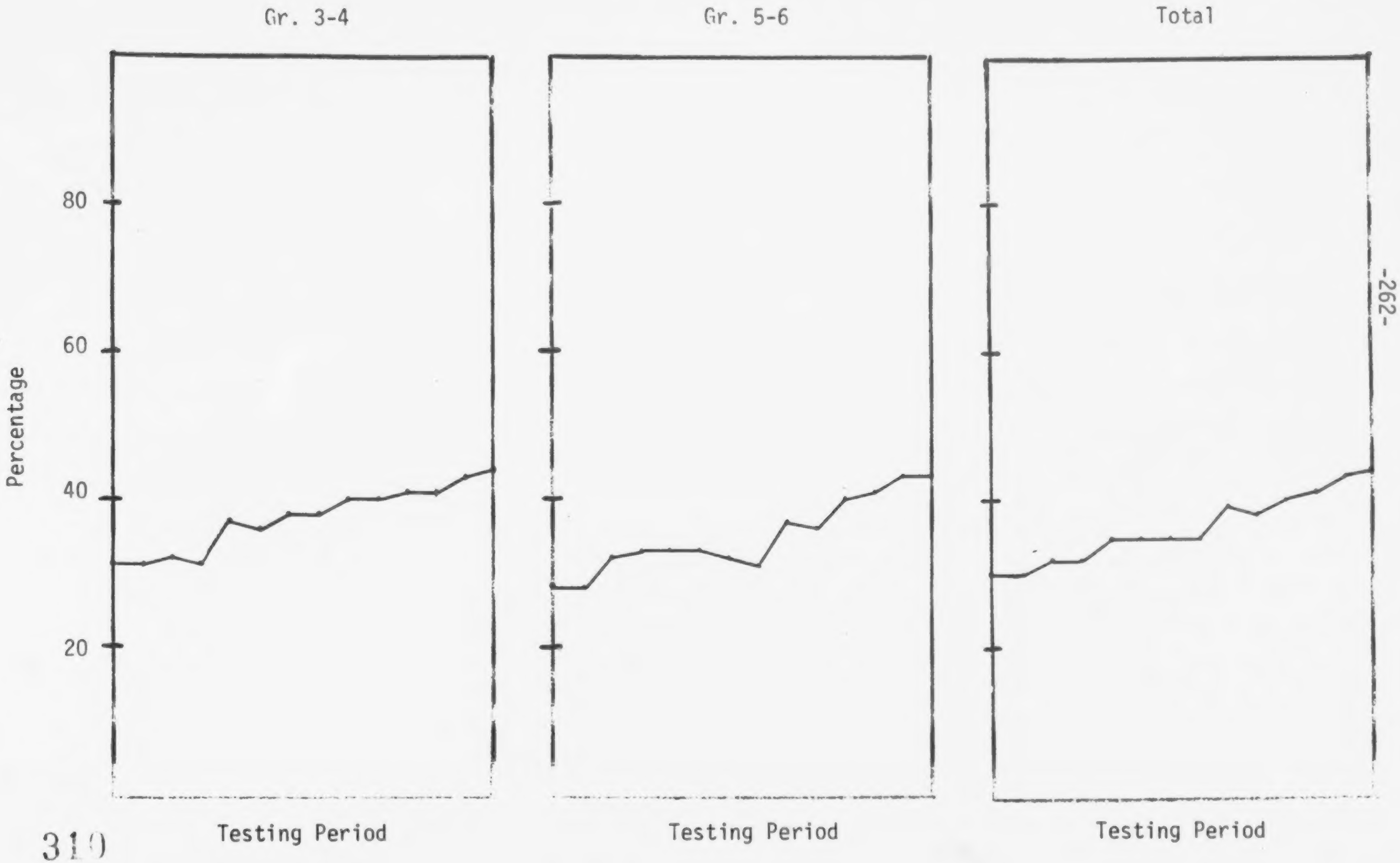
Technique	% Utilizing
a. Using multicultural curriculum materials	72%
b. Teaching minority group history or culture	43%
c. Providing opportunities for students to work in groups	94%
d. Developing new multicultural curriculum or units of study	29%
e. Providing opportunities for peer tutoring	54%
f. Rearranging seating or work groups	80%
g. Providing opportunities for students to play many roles	57%
h. Involving students in decision-making	82%
i. Integrated field trip experiences	32%
j. Viewing multicultural performances or programs	48%
k. Involving white and minority parents in school activities	43%
l. Increasing staff awareness in multicultural areas	29%
m. Preparing special activities for different ethnic holidays	45%

Graph J1

Percentage of Selections That Were Cross-Racial by Group

Fourteen Testing Periods

(1978-79 -- 1984-85)

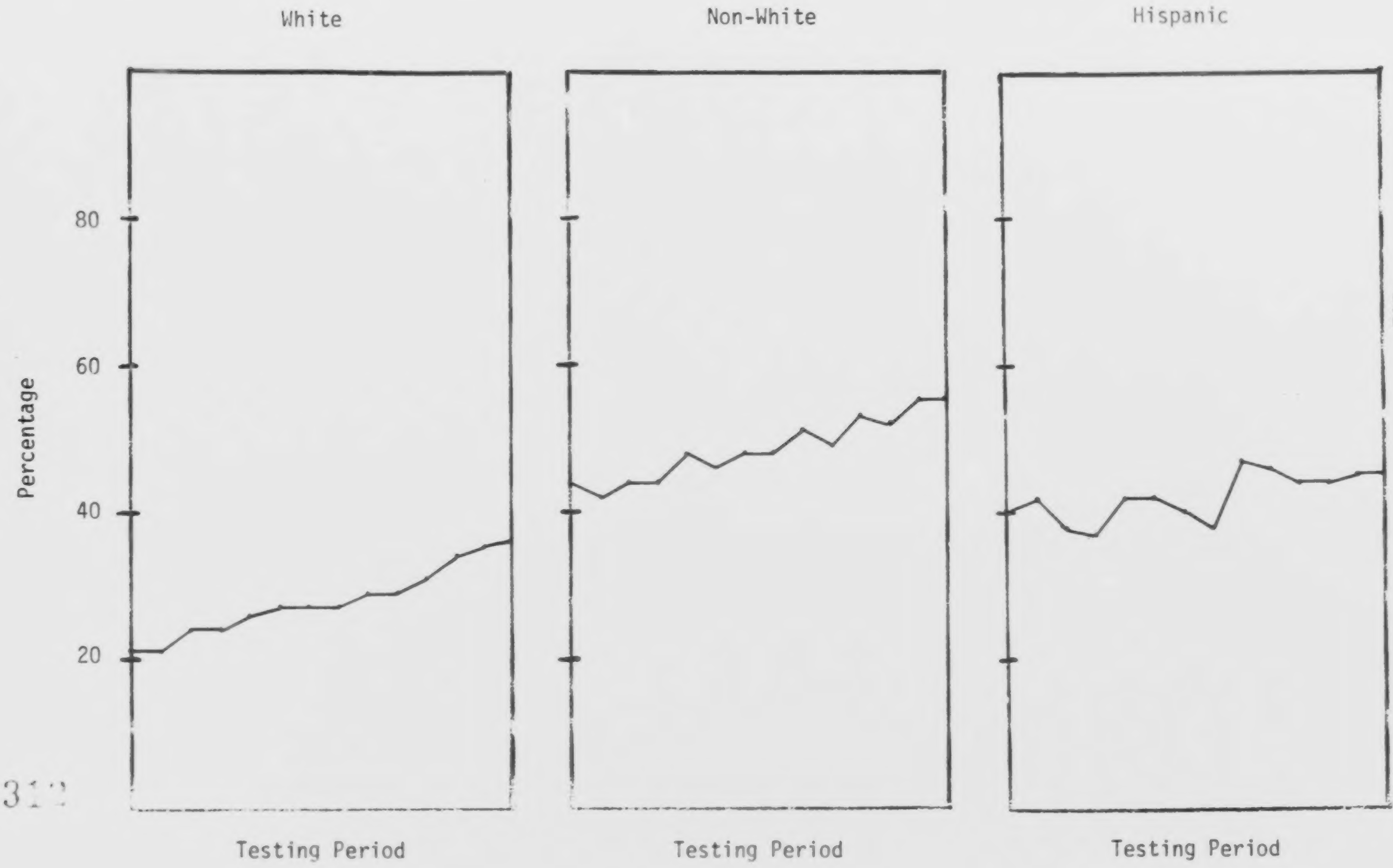


Graph J1 (Cont.)

Percentage of Selections That Were Cross-Racial by Group

Fourteen Testing Periods

(1978-79 -- 1984-85)



Graph J1 (Cont.)

Percentage of Selections That Were Cross-Racial by Group

Fourteen Testing Periods

(1978-79 -- 1984-85)

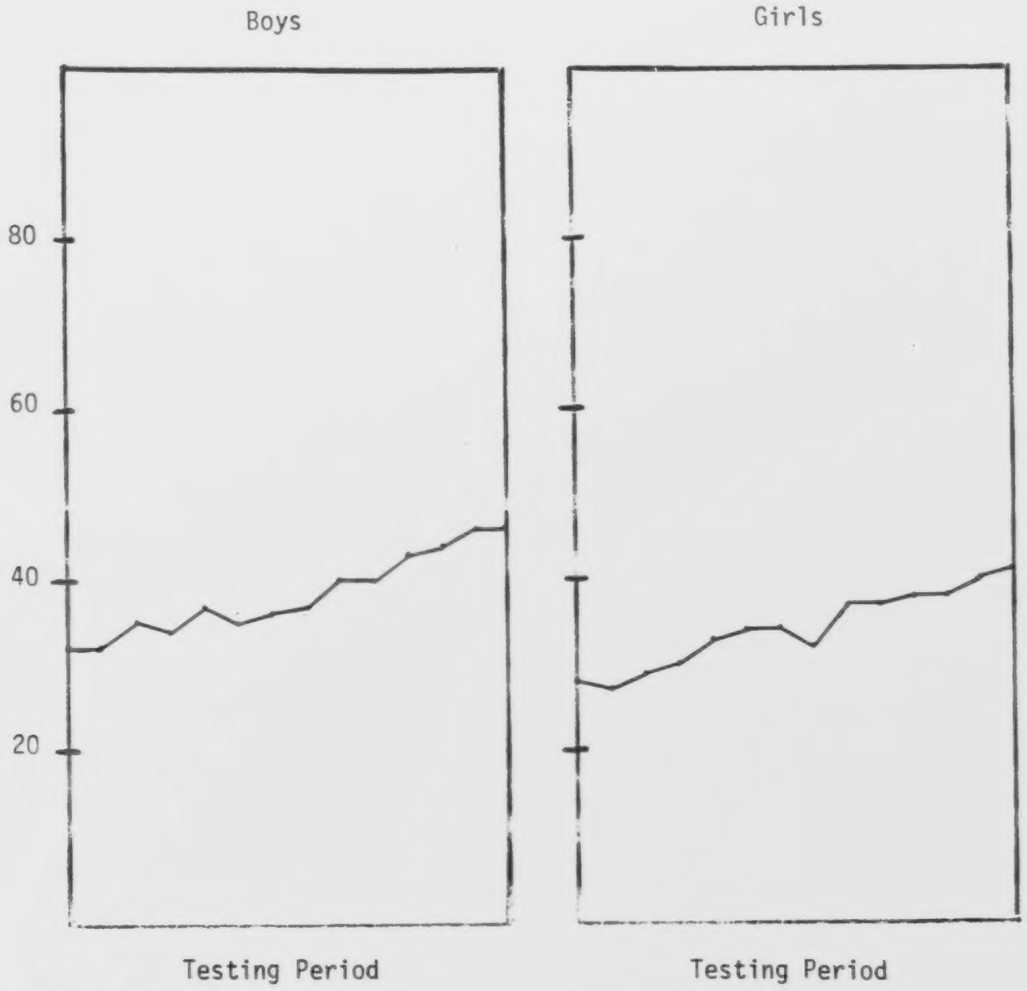


TABLE J2

Percentage of Selections That Were Cross-Racial by Group

14 Testing Periods

Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Ave
W-Boy	22	23	27	24	28	26	27	28	31	30	35	38	39	38	29.7
W-Girl	20	19	22	23	25	28	26	26	27	28	28	30	32	34	26.2
NW-Boy	48	47	48	50	53	51	53	55	53	50	52	51	58	57	51.9
NW-Girl	40	37	40	39	44	41	43	42	49	47	54	52	52	53	45.2
H-Boy	40	43	41	40	43	42	39	40	47	47	47	48	47	47	43.6
H-Girl	40	40	34	34	40	41	41	35	46	44	42	41	43	42	40.2
White	21	21	24	24	26	27	27	27	29	29	31	34	35	36	27.9
Nonwhite	44	42	44	44	48	46	48	48	51	49	53	52	55	55	48.5
Hispanic	40	42	38	37	42	42	40	38	47	46	44	44	45	45	42.1
Boys	32	32	35	34	37	35	36	37	40	40	43	44	46	46	38.4
Girls	28	27	29	30	33	34	34	32	37	37	38	38	40	41	34.1
Gr. 3-4	31	31	32	31	37	36	38	38	40	40	41	41	43	44	37.4
Gr. 5-6	28	28	32	33	33	33	32	31	37	36	40	41	43	44	35.0
TOTAL	30	30	32	32	35	35	35	35	39	38	40	41	43	44	36.4

TABLE J3

Percent of Selections That Were Cross-Racial

By Race, Sex, Subgroup

Grades 3, 4

(14 Testing Periods)

Subgroup	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Ave
W-Boys	21	22	25	23	30	28	27	29	31	33	38	38	37	38	30.0
W-Girls	21	20	22	23	26	28	31	29	27	28	27	29	32	33	26.9
NW-Boys	49	49	49	50	53	51	59	61	53	51	52	52	65	65	54.2
NW-Girls	45	43	43	39	47	44	48	46	54	48	58	55	56	56	48.7
H-Boys	39	42	42	43	50	46	40	45	50	55	45	48	43	44	45.1
H-Girls	47	40	34	33	43	45	45	40	49	47	39	39	43	43	41.9
White	21	21	24	23	28	28	29	29	29	30	32	33	35	35	28.4
Nonwhite	47	46	46	44	50	47	53	53	53	49	55	53	60	60	51.1
Hispanic	43	41	38	38	47	45	42	43	50	51	42	43	43	43	43.5
Boys	31	32	34	32	40	37	38	40	41	43	44	45	45	46	39.1
Girls	32	29	30	29	35	35	39	37	39	37	38	38	41	42	35.8
TOTAL	31	31	32	31	37	36	38	38	40	40	41	41	43	44	37.4

TABLE J4

Percent of Selections That Were Cross-Racial

By Race, Sex, Subgroup

Grades 5, 6

(14 Testing Periods)

Subgroup	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Ave
W-Boys	24	24	28	27	25	24	27	27	31	28	33	37	41	39	29.6
W-Girls	17	18	22	24	23	27	21	22	28	27	28	31	31	35	25.3
NW-Boys	46	44	48	51	53	50	46	50	54	50	51	49	52	51	49.6
NW-Girls	33	29	36	39	42	39	38	37	44	47	50	50	48	51	41.6
H-Boys	42	43	40	37	37	38	37	34	45	40	50	48	54	53	42.7
H-Girls	30	41	34	34	36	38	37	30	43	41	48	44	43	42	38.6
White	21	21	26	26	24	26	25	25	29	28	31	34	36	37	27.8
Nonwhite	39	37	42	45	47	44	42	43	49	48	51	50	50	51	45.6
Hispanic	36	42	37	36	37	38	37	32	44	40	49	46	48	47	40.6
Boys	32	32	36	36	34	33	34	35	39	36	41	42	47	45	37.3
Girls	24	24	29	31	31	33	29	28	35	36	38	39	39	41	32.6
TOTAL	28	28	32	33	33	33	32	31	37	36	40	41	43	43	35.0

TABLE J5

Average Percent of Selections That Were Cross-Racial
By Race, Sex, Subgroup
(14 Testing Periods)

Subgroup		Gr. 3-4	Gr. 5-6	Total
White:	Boys	30.0	29.6	29.7
White:	Girls	26.9	25.3	26.2
Nonwhite:	Boys	54.2	49.6	51.9
Nonwhite:	Girls	48.7	41.6	45.2
Hispanic:	Boys	45.1	42.7	43.6
Hispanic:	Girls	41.9	38.6	40.2
Whites		28.4	27.8	27.9
Nonwhites		51.1	45.6	48.5
Hispanics		43.5	40.6	42.1
Boys		39.1	37.3	38.4
Girls		35.8	32.6	34.1
TOTAL		37.4	35.0	36.4

TABLE J6

Percentage of Selections That Were Cross-Racial By Question

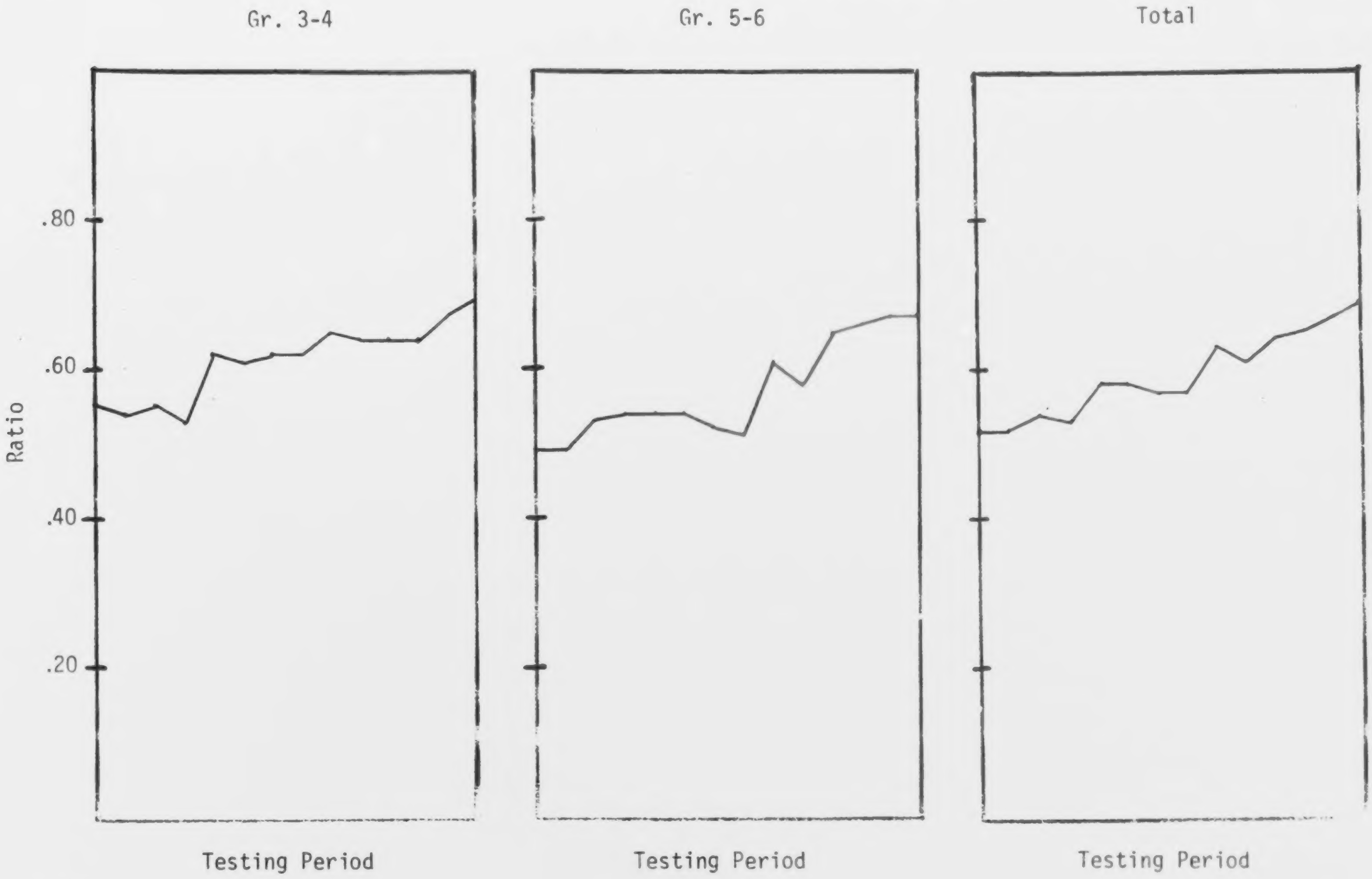
Question	Percentage Gr. 3-4	Gr. 5-6	Total
1. Project	42%	43%	42%
2. Lunch	42%	40%	41%
3. Trip	41%	40%	40%
4. Game	46%	45%	46%
5. Sit Near	42%	43%	42%
6. New Friend	55%	54%	55%
7. Party	39%	38%	38%

Graph J2

Ratio of Actual to Expected Cross-Racial Selections

Fourteen Testing Periods

(1978-79 -- 1984-85)

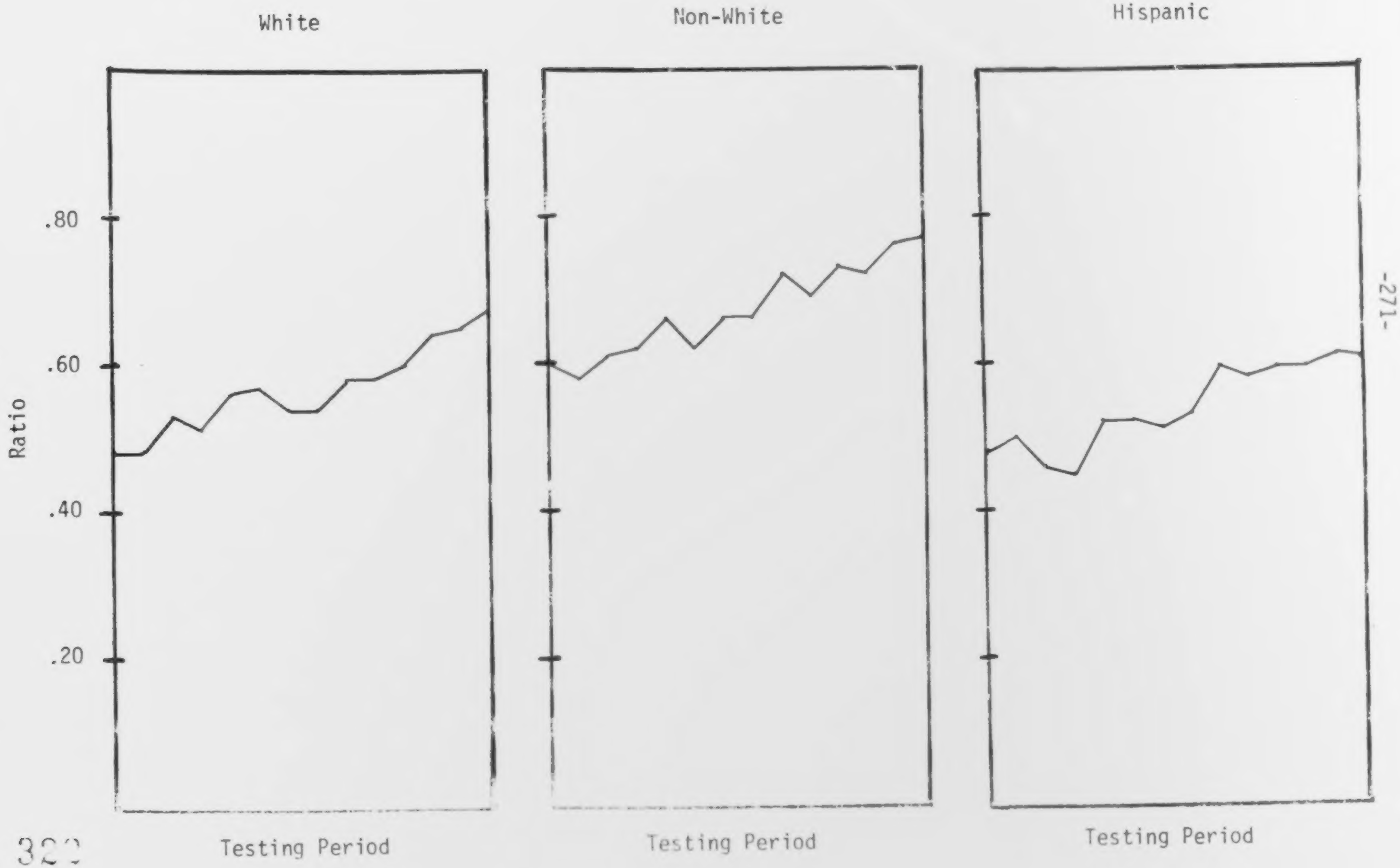


Graph J2 (Cont.)

Ratio of Actual to Expected Cross-Racial Selections

Fourteen Testing Periods

(1978-79 -- 1984-85)



Graph J2 (Cont.)

Ratio of Actual to Expected Cross-Racial Selections

Fourteen Testing Periods

(1978-79 -- 1984-85)

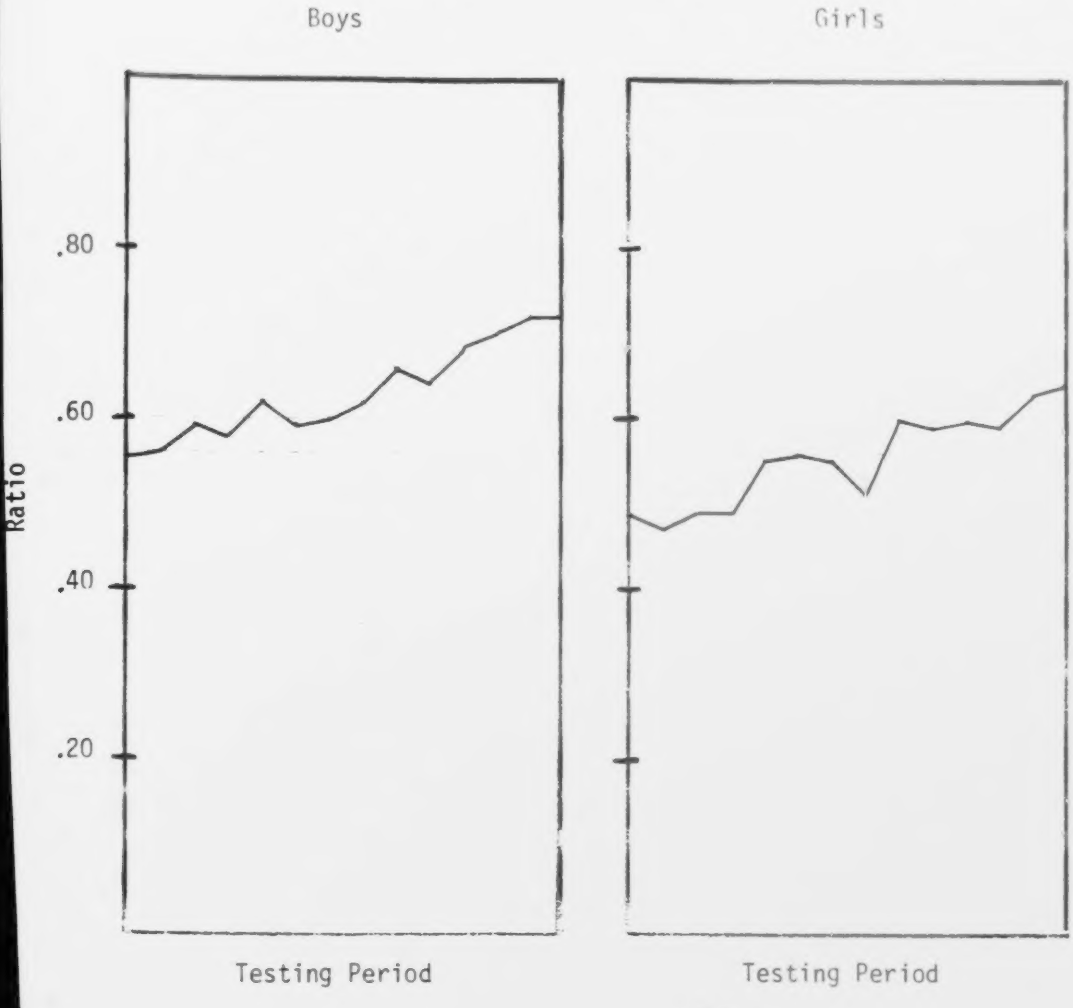


TABLE J7

Ratio of Actual to Expected Cross-Racial Selections by Group

(14 Testing Periods)

	Testing Period														
Subgroup	1	2	3	4	5	6	7	8	9	10	11	12	13	14	**Ave**
W-Boy	.51	.52	.59	.54	.60	.57	.57	.59	.62	.60	.68	.72	.72	.70	**.61**
W-Girl	.45	.43	.46	.48	.52	.57	.51	.49	.54	.55	.52	.57	.59	.63	**.52**
NW-Boy	.65	.64	.66	.69	.71	.68	.71	.74	.75	.71	.73	.73	.81	.79	**.71**
NW-Girl	.55	.52	.56	.55	.61	.57	.61	.59	.69	.66	.74	.70	.72	.75	**.63**
H-Boy	.48	.52	.50	.49	.55	.53	.50	.51	.60	.60	.61	.62	.64	.63	**.56**
H-Girl	.48	.48	.42	.42	.50	.52	.53	.46	.59	.56	.57	.56	.58	.56	**.52**
White	.48	.48	.53	.51	.56	.57	.54	.54	.58	.58	.60	.64	.65	.67	**.57**
Nonwhite	.60	.58	.61	.62	.66	.62	.66	.66	.72	.69	.73	.72	.76	.77	**.67**
Hispanic	.48	.50	.46	.45	.52	.52	.51	.49	.59	.58	.59	.59	.61	.60	**.54**
Boys	.55	.56	.59	.58	.62	.59	.60	.62	.66	.64	.68	.70	.72	.72	**.63**
Girls	.49	.47	.49	.49	.55	.56	.55	.51	.60	.59	.60	.59	.63	.64	**.55**
Gr. 3-4	.55	.54	.55	.53	.62	.61	.62	.62	.65	.64	.64	.64	.67	.69	**.61**
Gr. 5-6	.49	.49	.53	.54	.54	.54	.52	.51	.61	.58	.65	.66	.67	.67	**.57**
TOTAL	.52	.52	.54	.53	.58	.58	.57	.57	.63	.61	.64	.65	.67	.69	**.59**

TABLE J8

Ratios of Actual to Expected Cross-Racial Selections

By Race, Sex, Subgroup

Grades 3, 4

(14 Testing Periods)

	Testing Period														
Subgroup	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Ave
W-Boys	.50	.51	.60	.53	.64	.60	.57	.60	.61	.62	.68	.68	.69	.72	.61
W-Girls	.50	.47	.48	.49	.56	.60	.59	.54	.54	.56	.50	.54	.60	.62	.54
NW-Boys	.65	.66	.66	.67	.71	.69	.78	.80	.77	.75	.74	.74	.86	.88	.74
NW-Girls	.61	.60	.60	.55	.64	.60	.68	.65	.75	.66	.77	.72	.75	.77	.67
H-Boys	.47	.52	.50	.51	.63	.58	.52	.58	.63	.69	.61	.65	.61	.60	.58
H-Girls	.56	.47	.40	.40	.54	.56	.58	.53	.63	.60	.55	.56	.59	.58	.54
White	.50	.49	.54	.51	.60	.60	.58	.57	.57	.59	.59	.60	.66	.66	.58
Nonwhite	.63	.63	.63	.60	.67	.64	.73	.73	.76	.70	.75	.73	.80	.81	.70
Hispanic	.51	.50	.45	.46	.59	.57	.55	.56	.63	.65	.58	.60	.60	.59	.56
Boys	.55	.56	.60	.57	.66	.62	.62	.66	.67	.68	.68	.70	.70	.72	.64
Girls	.55	.51	.50	.49	.58	.59	.62	.58	.63	.60	.60	.59	.64	.66	.58
TOTAL	.55	.54	.55	.53	.62	.61	.62	.62	.65	.64	.64	.64	.67	.69	.61

TABLE J9

Ratios of Actual to Expected Cross-Racial Selections

By Race, Sex, Subgroup

Grades 5, 6

(14 Testing Periods)

	Testing Period														
Subgroup	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Ave
W-Boys	.53	.52	.60	.56	.56	.54	.57	.58	.64	.59	.68	.73	.75	.72	**.61**
W-Girls	.37	.39	.44	.47	.47	.54	.42	.43	.54	.53	.55	.60	.55	.63	**.50**
NW-Boys	.64	.62	.67	.72	.71	.66	.63	.68	.73	.67	.72	.70	.75	.74	**.69**
NW-Girls	.47	.41	.51	.55	.58	.54	.54	.52	.63	.67	.70	.69	.70	.74	**.59**
H-Boys	.49	.52	.49	.46	.46	.47	.47	.43	.57	.51	.62	.60	.70	.69	**.53**
H-Girls	.36	.48	.43	.44	.46	.48	.48	.39	.54	.52	.62	.58	.57	.55	**.49**
White	.45	.46	.52	.52	.52	.54	.50	.50	.59	.56	.62	.67	.65	.67	**.56**
Nonwhite	.55	.52	.59	.63	.64	.60	.58	.59	.68	.67	.71	.70	.72	.74	**.64**
Hispanic	.43	.50	.46	.45	.46	.48	.47	.41	.55	.51	.62	.59	.63	.62	**.51**
Boys	.56	.55	.59	.59	.58	.56	.57	.57	.65	.59	.68	.69	.75	.71	**.62**
Girls	.40	.41	.46	.49	.51	.53	.47	.45	.57	.57	.62	.62	.61	.64	**.53**
TOTAL	.49	.49	.53	.54	.54	.54	.52	.51	.61	.58	.65	.66	.67	.67	**.57**

TABLE J10

Average Ratios of Actual to Expected
Cross-Racial Selections
By Race, Sex, Subgroup
(14 Testing Periods)

Subgroup		Gr. 3-4	Gr. 5-6	Total
White:	Boys	.61	.61	.61
White:	Girls	.54	.50	.52
Nonwhite:	Boys	.74	.69	.71
Nonwhite:	Girls	.67	.59	.63
Hispanic:	Boys	.58	.53	.56
Hispanic:	Girls	.54	.49	.52
Whites		.58	.56	.57
Nonwhites		.70	.64	.67
Hispanics		.56	.51	.54
Boys		.64	.62	.63
Girls		.58	.53	.55
TOTAL		.61	.57	.59

TABLE J11

Slope of the Regression Line of
The Percent of Selections That Were Cross-Racial
and of
The Ratio of Actual to Expected Cross-Racial Selections
By Race, Sex, Subgroup
(14 Testing Periods)

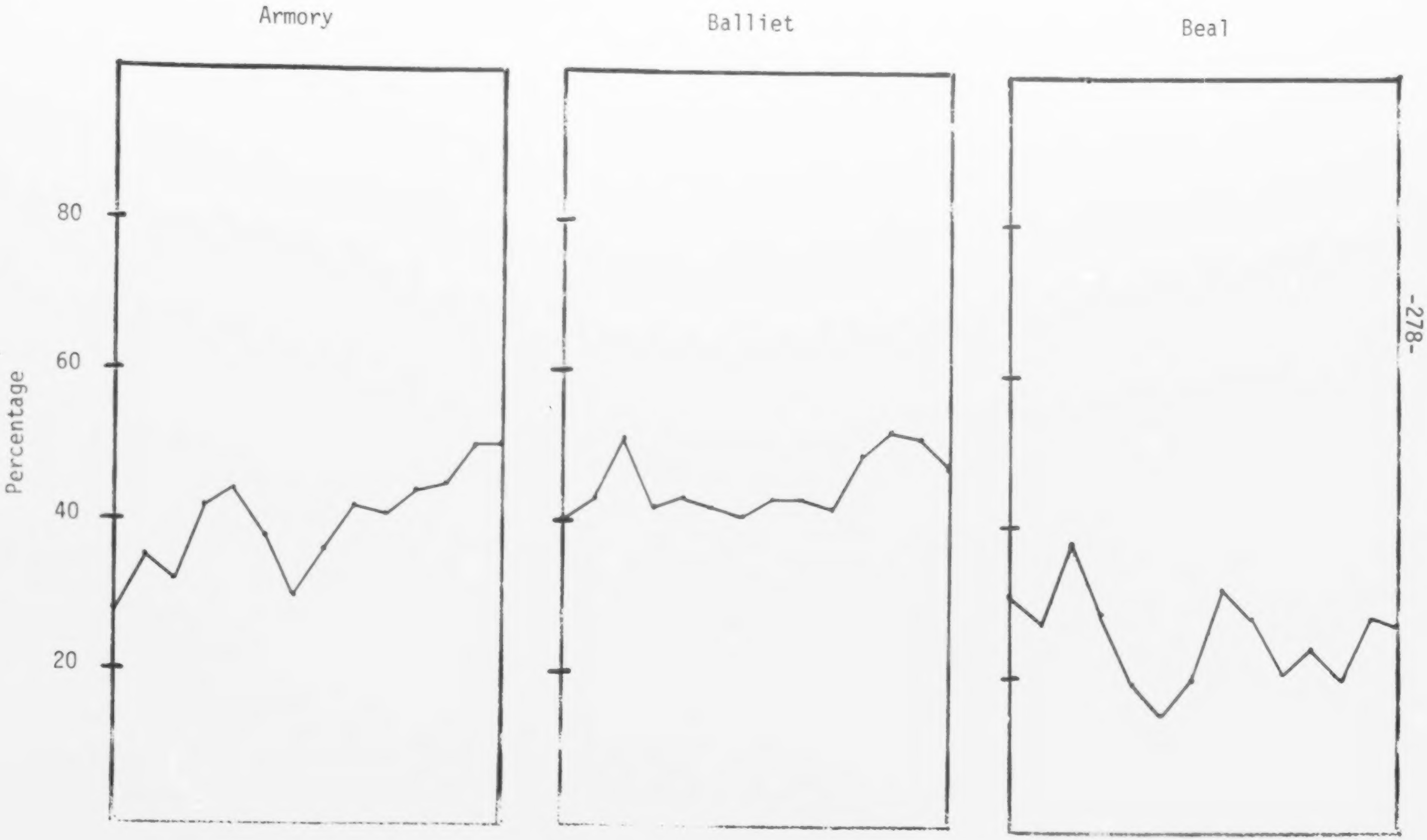
		Slope					
		CRS Percent			CRS Ratio		
Subgroup		Gr. 3, 4	Gr. 5, 6	Total	Gr. 3, 4	Gr. 5, 6	Total
White:	Boys	1.39	1.19	1.29	1.44	1.64	1.54
White:	Girls	0.84	1.12	0.98	0.74	1.64	1.19
Nonwhite:	Boys	0.93	0.36	0.60	1.51	0.67	1.06
Nonwhite:	Girls	1.23	1.51	1.29	1.51	2.21	1.75
Hispanic:	Boys	0.41	1.01	0.62	1.15	1.58	1.24
Hispanic:	Girls	0.21	0.88	0.45	1.00	1.42	1.07
Whites		1.08	1.12	1.12	1.08	1.62	1.34
Nonwhites		1.05	0.95	0.97	1.47	1.45	1.41
Hispanics		0.29	0.90	0.51	1.06	1.46	1.19
Boys		1.21	0.99	1.12	1.25	1.32	1.32
Girls		0.92	1.22	1.05	1.02	1.77	1.24
TOTAL		1.05	1.13	1.07	1.11	1.46	1.30

Graph J3

Percentage of Selections That Were Cross-Racial by School

Fourteen Testing Periods

(1978-79 -- 1984-85)



330

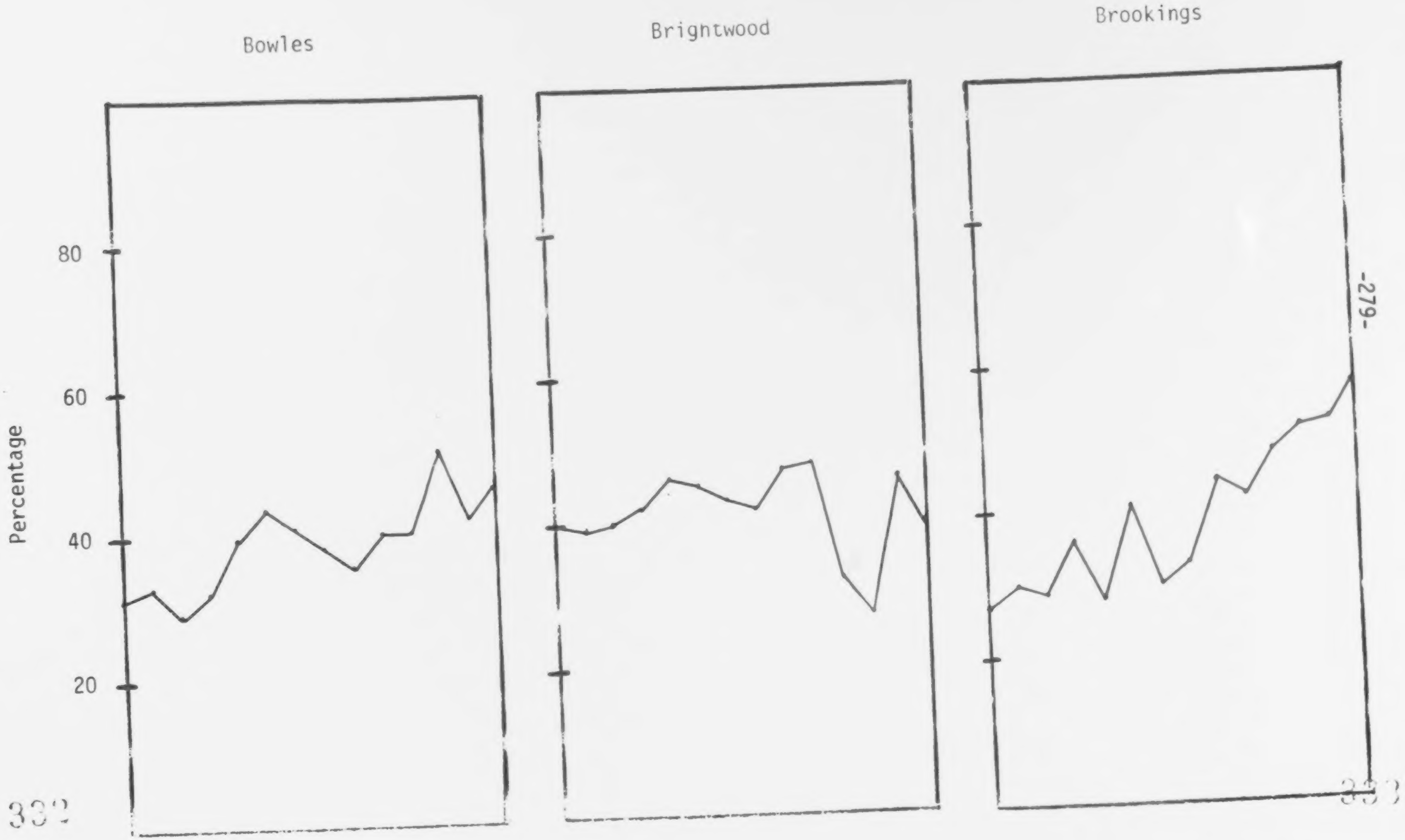
331

Graph J3 (Cont.)

Percentage of Selections That Were Cross-Racial by School

Fourteen Testing Periods

(1978-79 -- 1984-85)

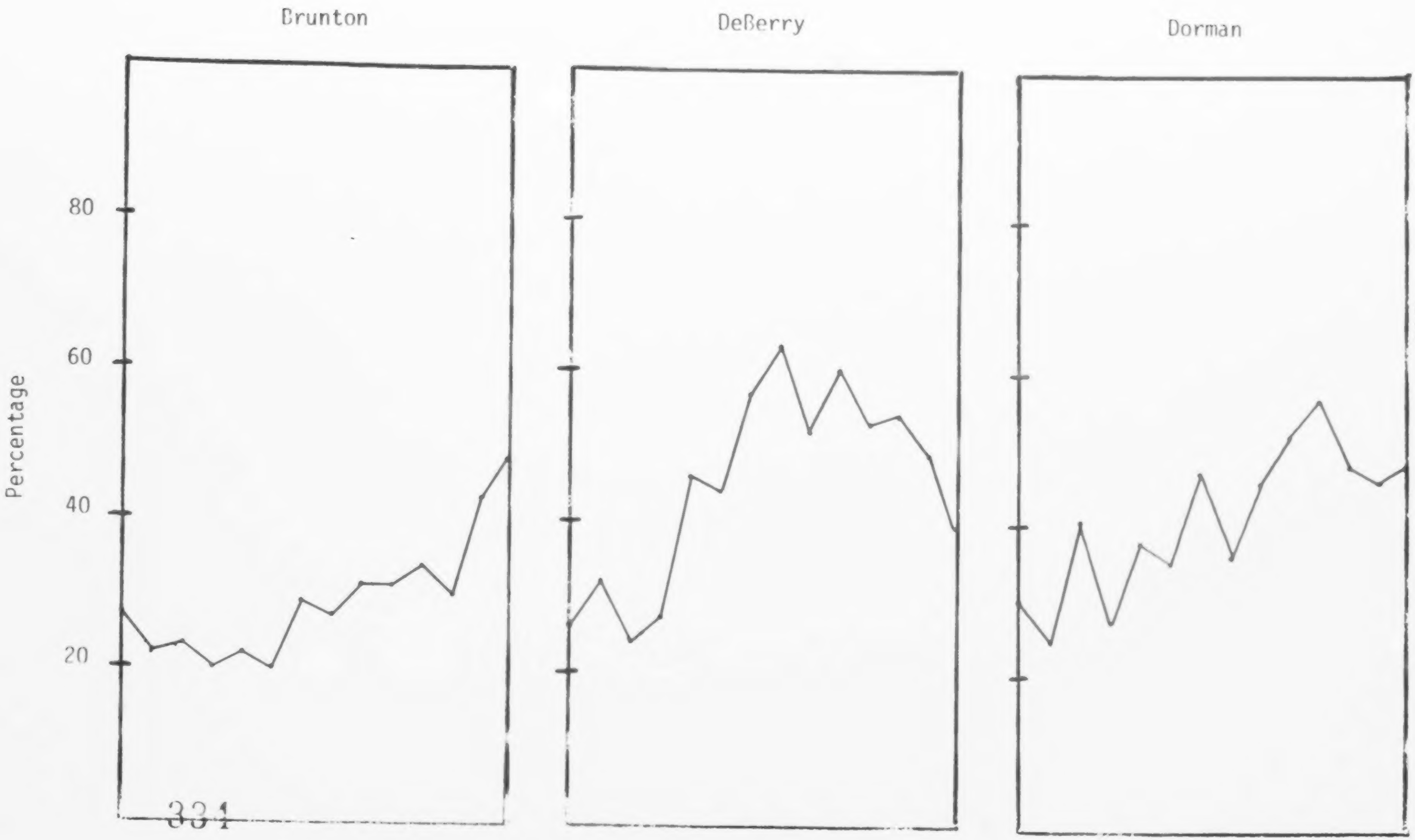


Graph J3 (Cont.)

Percentage of Selections That Were Cross-Racial by School

Fourteen Testing Periods

(1978-79 -- 1984-85)

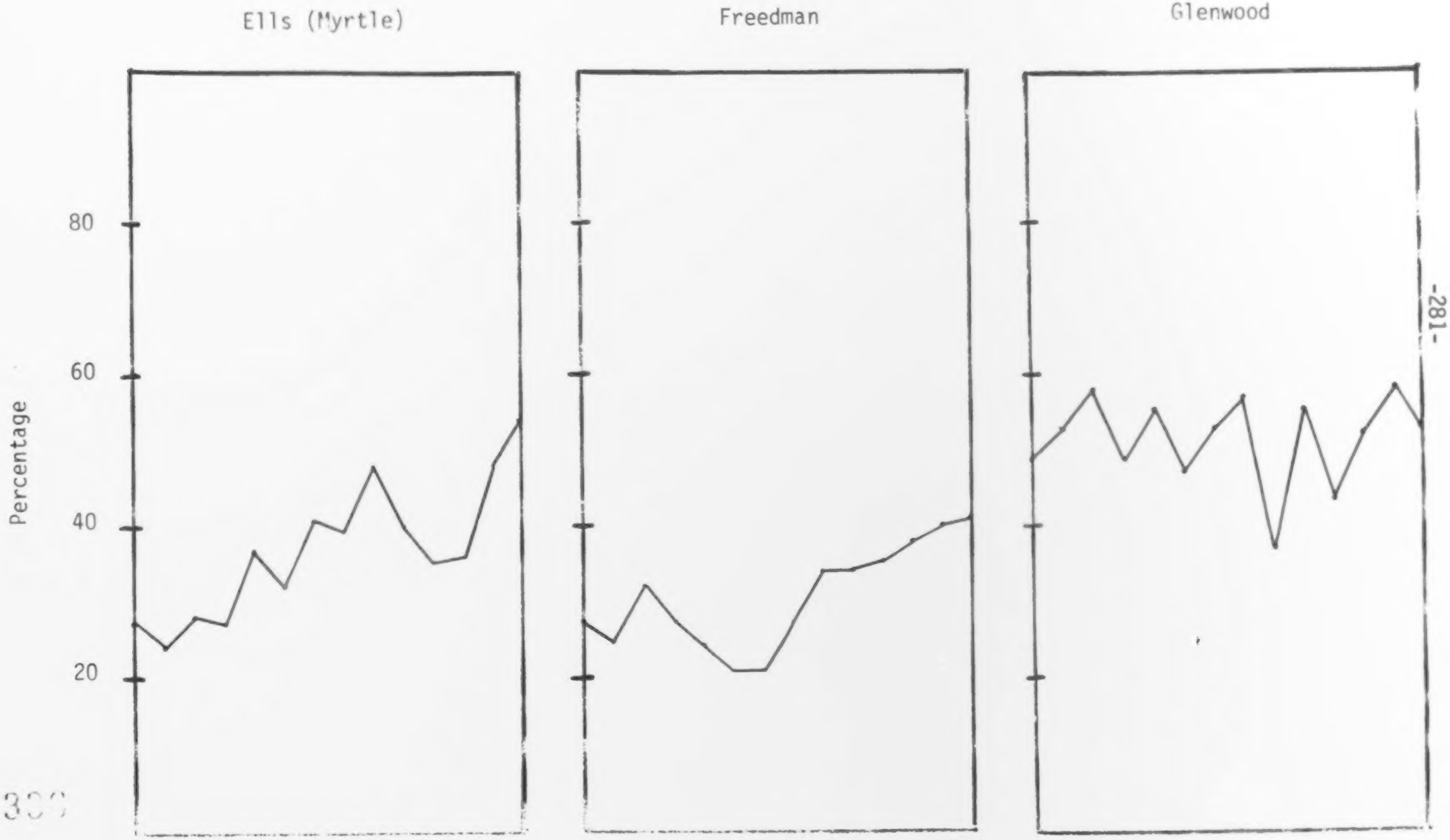


Graph J3 (Cont.)

Percentage of Selections That Were Cross-Racial by School

Fourteen Testing Periods

(1978-79 -- 1984-85)

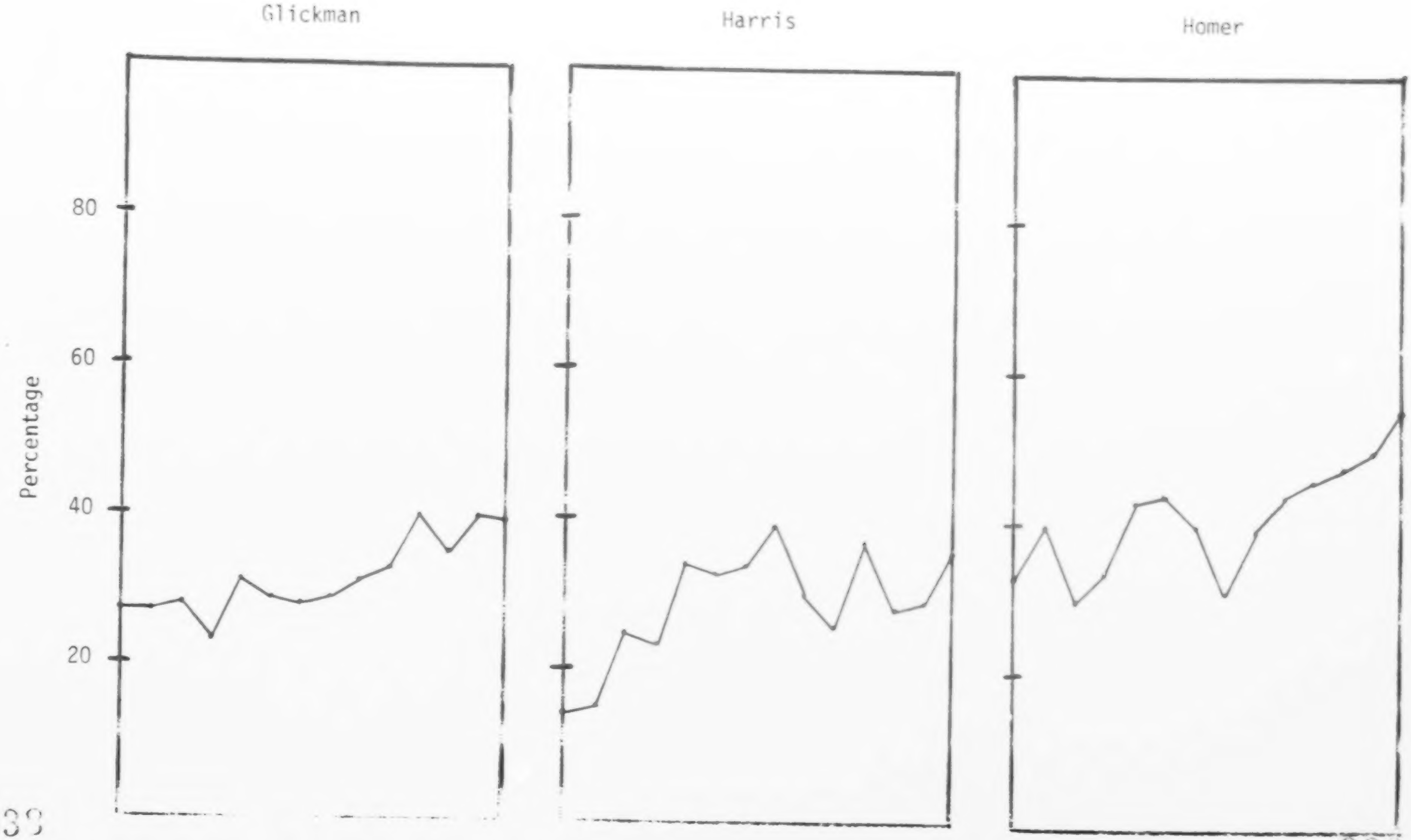


Graph J3 (Cont.)

Percentage of Selections That Were Cross-Racial by School

Fourteen Testing Periods

(1978-79 -- 1984-85)

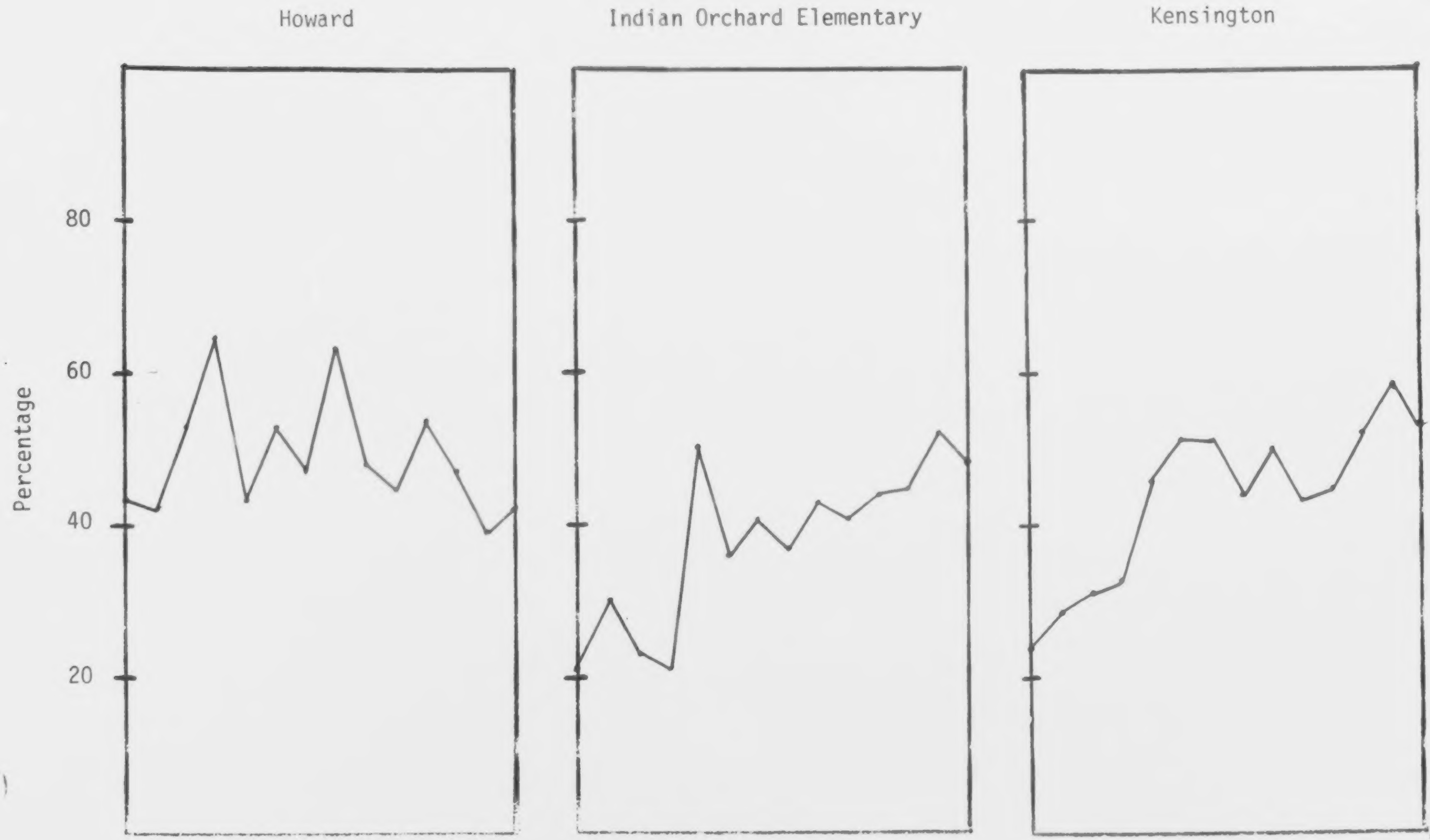


Graph J3 (Cont.)

Percentage of Selections That Were Cross-Racial by School

Fourteen Testing Periods

(1978-79 -- 1984-85)

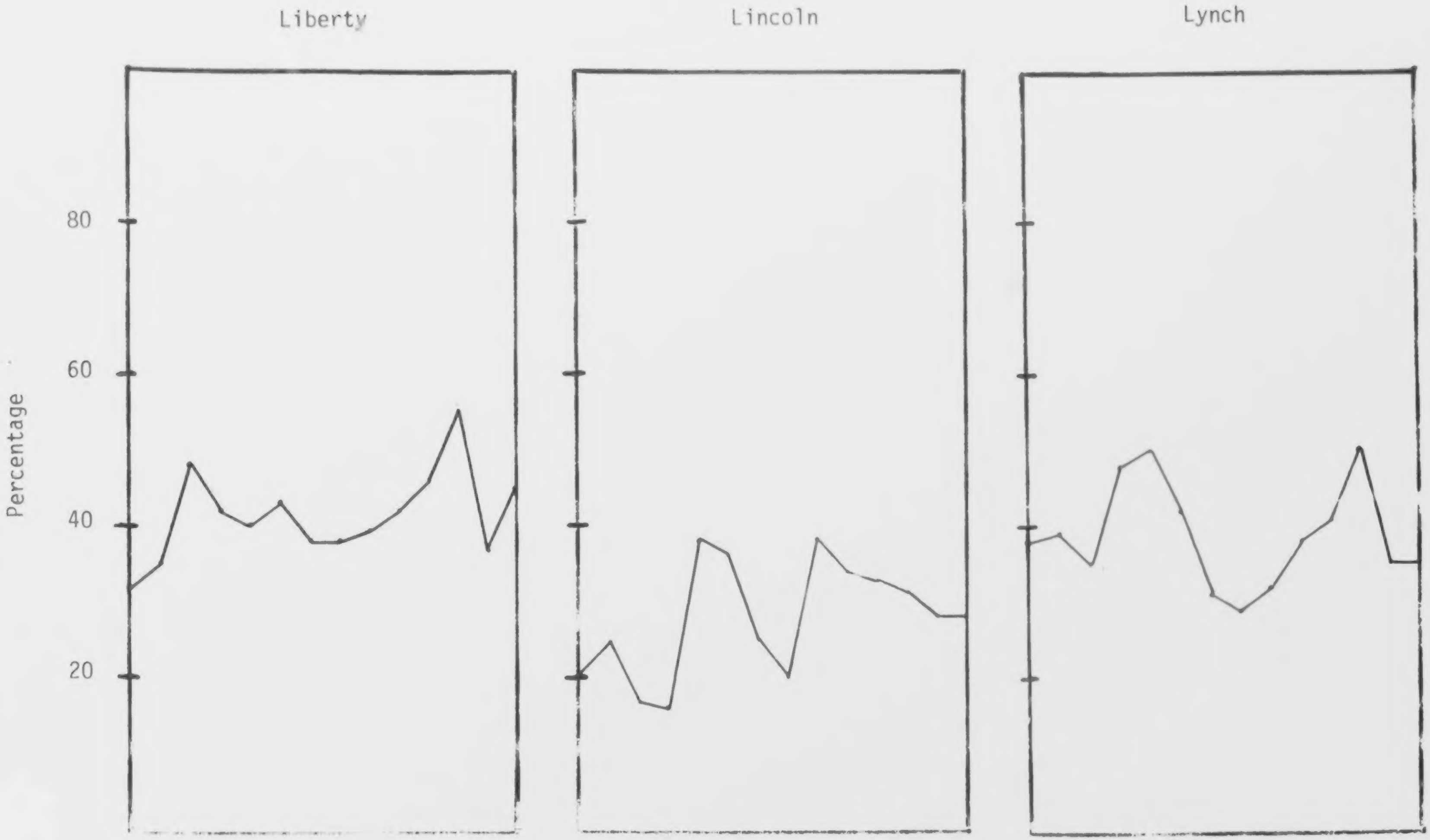


Graph J3 (Cont.)

Percentage of Selections That Were Cross-Racial by School

Fourteen Testing Periods

(1978-79 -- 1984-85)

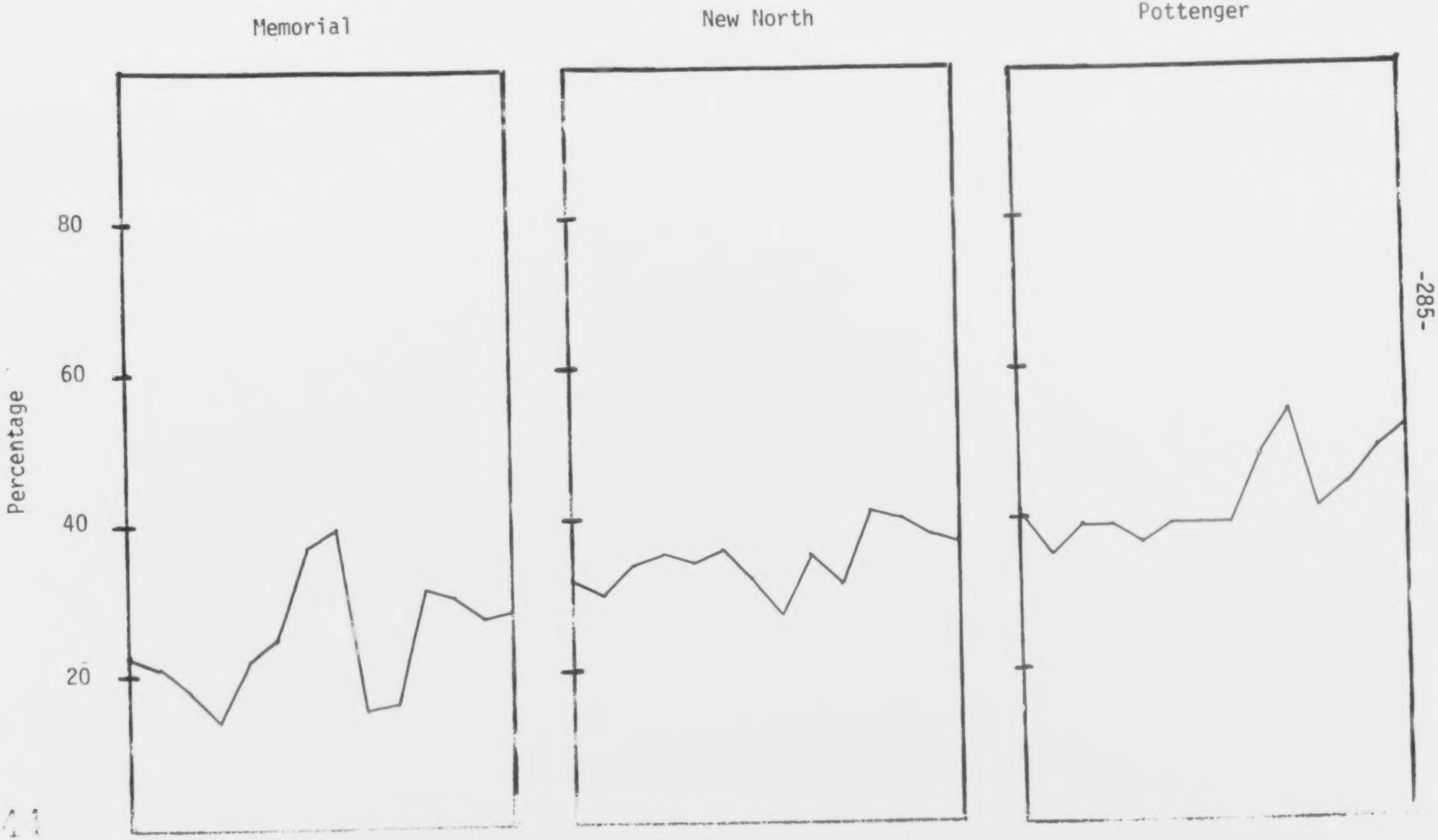


Graph J3 (Cont.)

Percentage of Selections That Were Cross-Racial by School

Fourteen Testing Periods

(1978-79 -- 1984-85)

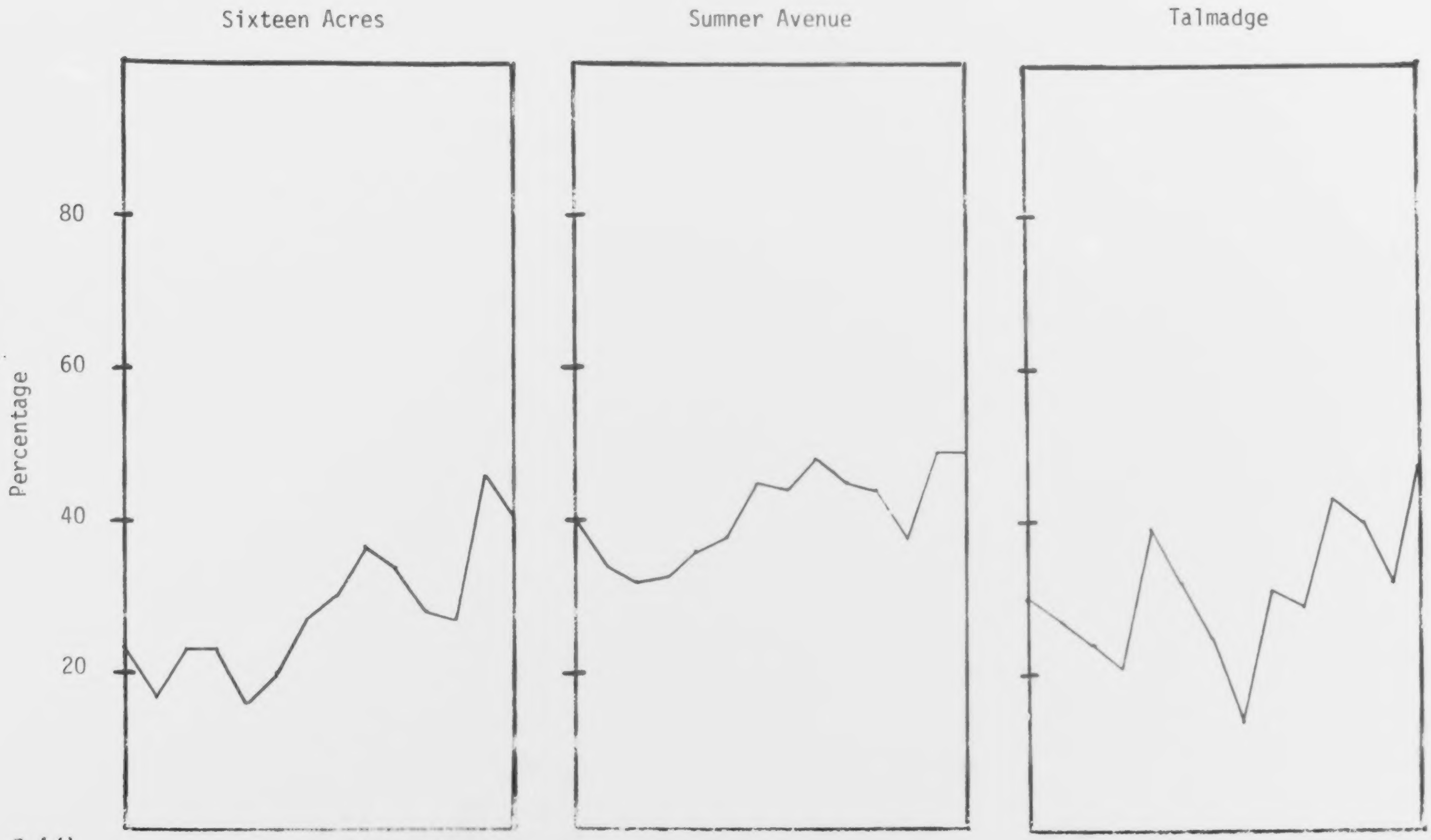


Graph J3 (Cont.)

Percentage of Selections That Were Cross-Racial by School

Fourteen Testing Periods

(1978-79 -- 1984-85)

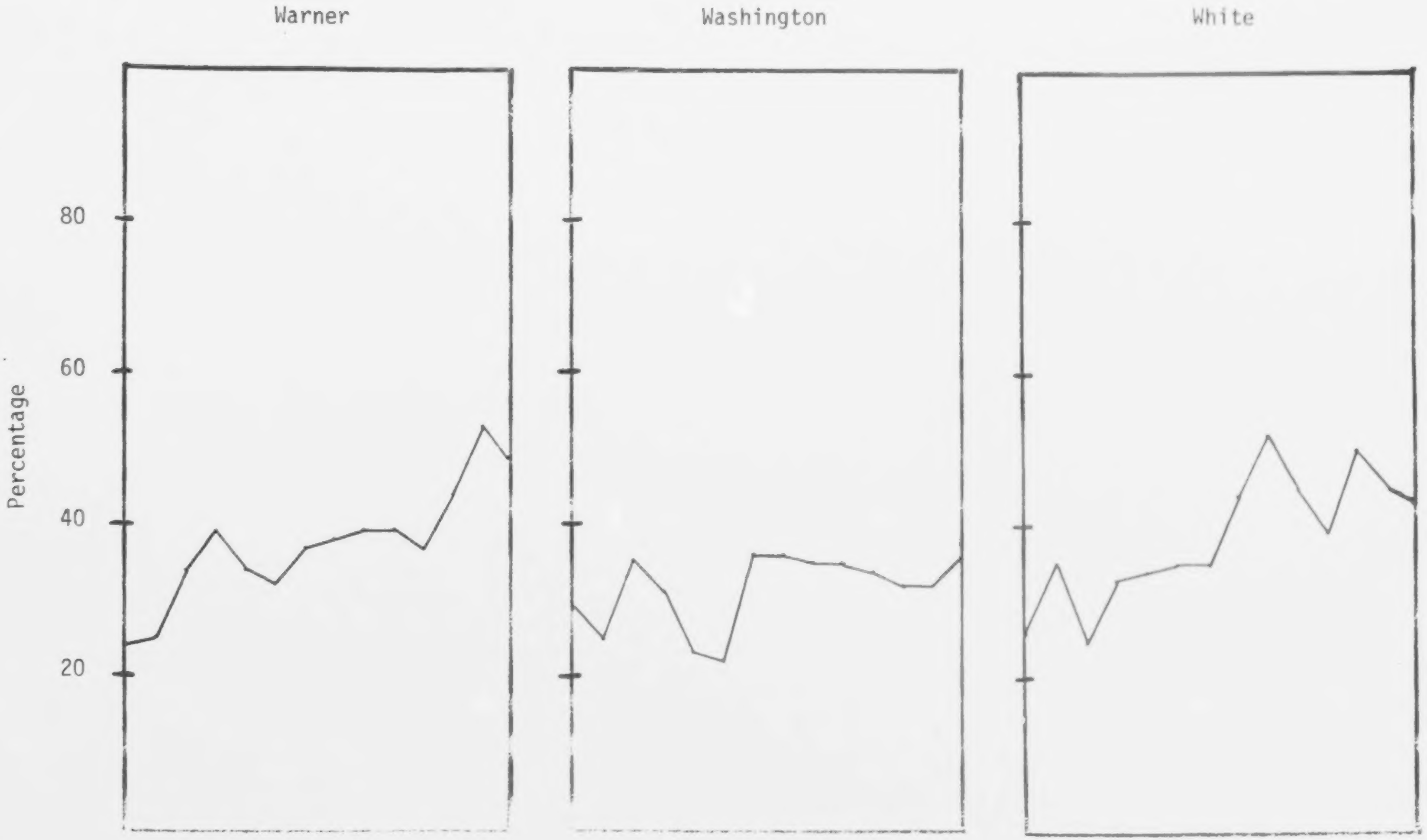


Graph J3 (Cont.)

Percentage of Selections That Were Cross-Racial by School

Fourteen Testing Periods

(1978-79 -- 1984-85)



Warner

Washington

White

TABLE J12

Percentage of Selections That Were Cross-Racial by School

14 Testing Periods

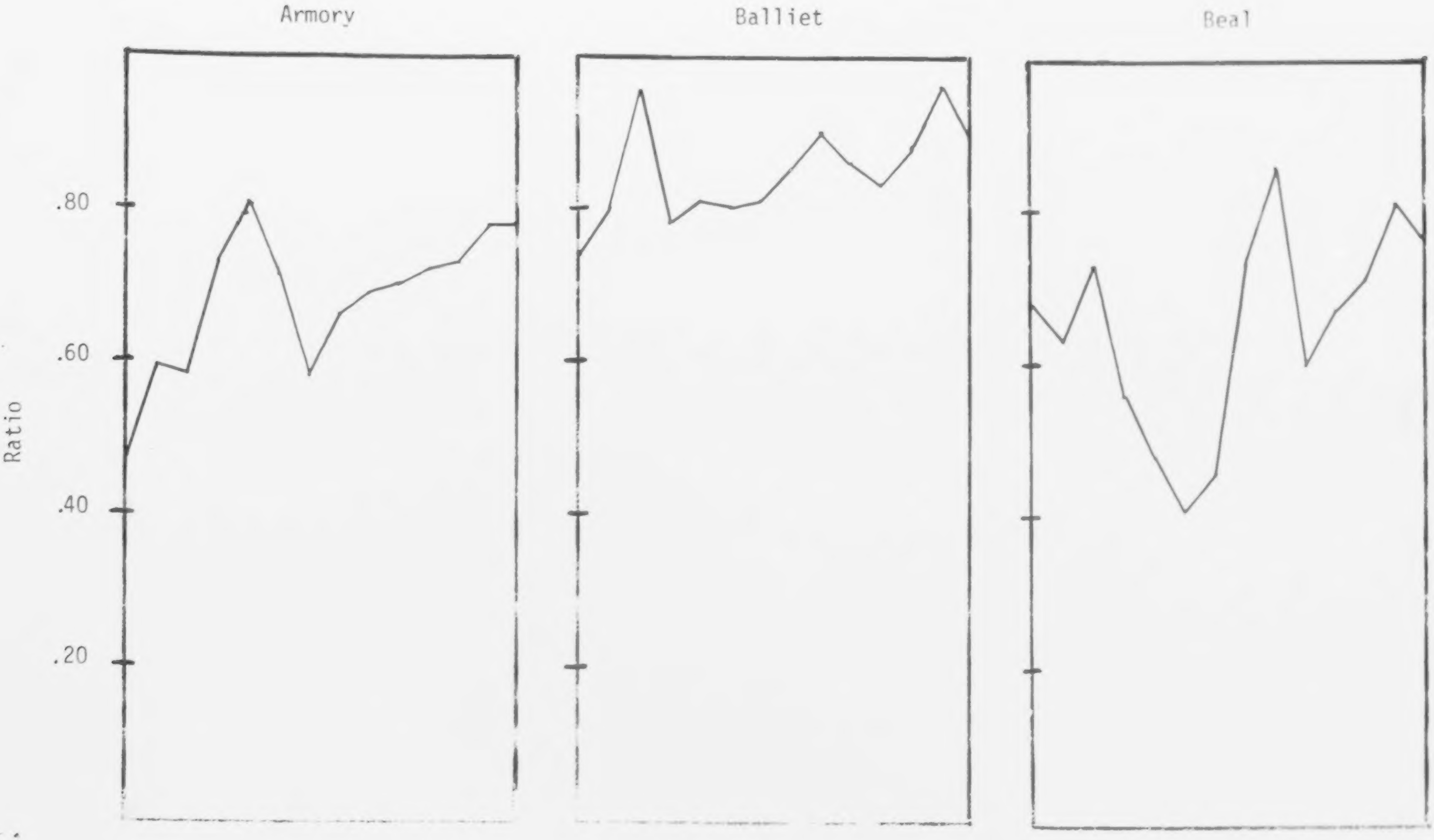
School	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Ave
Arm	28	35	32	42	44	38	30	36	42	41	44	45	50	50	39.8
Bal	40	43	51	42	43	42	41	43	43	42	49	52	51	47	44.9
Bea	31	27	38	29	19	15	20	32	28	21	24	20	28	27	25.6
Bow	31	33	29	32	39	43	41	38	35	40	40	51	42	46	38.6
Bri	40	39	40	42	46	45	43	42	47	48	32	27	46	39	41.1
Bro	27	30	29	36	28	41	30	33	44	42	46	51	52	57	39.1
Bru	27	22	23	20	22	20	29	27	31	31	34	30	43	48	29.1
DeB	26	32	24	27	46	42	57	63	52	60	53	54	49	39	44.6
Dor	30	25	41	27	38	35	47	36	46	52	57	48	46	48	41.1
El-My	27	24	28	27	37	32	41	39	48	40	35	36	48	54	36.9
Fre	27	25	32	27	24	21	21	27	34	34	35	38	40	41	30.4
Gle	49	53	58	49	55	47	53	57	37	55	43	52	58	53	51.4
Gli	27	27	28	23	31	29	28	29	31	33	40	35	40	39	31.4
Har	14	15	25	23	34	33	34	39	30	26	37	28	29	35	28.7
Hom	33	40	30	34	43	44	40	31	39	44	46	48	50	55	41.2
How	43	42	53	65	43	53	47	63	48	45	54	47	39	42	48.9
IOE	21	30	23	21	50	36	41	37	43	41	44	45	52	48	38.0
Kns	24	29	31	33	46	51	51	44	50	43	45	52	58	53	43.6
Lib	32	35	48	42	40	43	38	38	39	42	46	55	37	45	41.4
Lin	20	25	17	16	38	36	25	20	38	34	33	31	28	28	27.8
Lyn	38	39	35	48	50	42	31	29	32	38	41	50	35	35	38.8
Mem	22	21	18	14	22	25	37	39	15	16	31	30	27	28	24.6
New	32	30	34	35	34	36	32	27	35	31	41	40	38	37	34.4
Pot	41	35	39	39	37	39	39	39	48	54	41	44	49	51	42.5
Six	23	17	23	23	16	20	27	30	37	34	28	27	46	41	28.0
Sum	40	34	32	33	36	38	45	44	48	45	44	38	49	49	41.1
Tal	30	27	24	21	39	32	25	14	31	29	43	40	32	47	31.0
War	24	25	34	39	34	32	37	38	39	39	37	44	53	49	37.4
Was	29	25	35	31	23	22	36	36	35	35	34	32	32	35	31.4
Whi	26	35	25	33	34	35	35	44	52	45	39	50	45	43	38.6

Graph J4

Ratio of Actual to Expected Cross-Racial Selections by School

Fourteen Testing Periods

(1978-79 -- 1984-85)

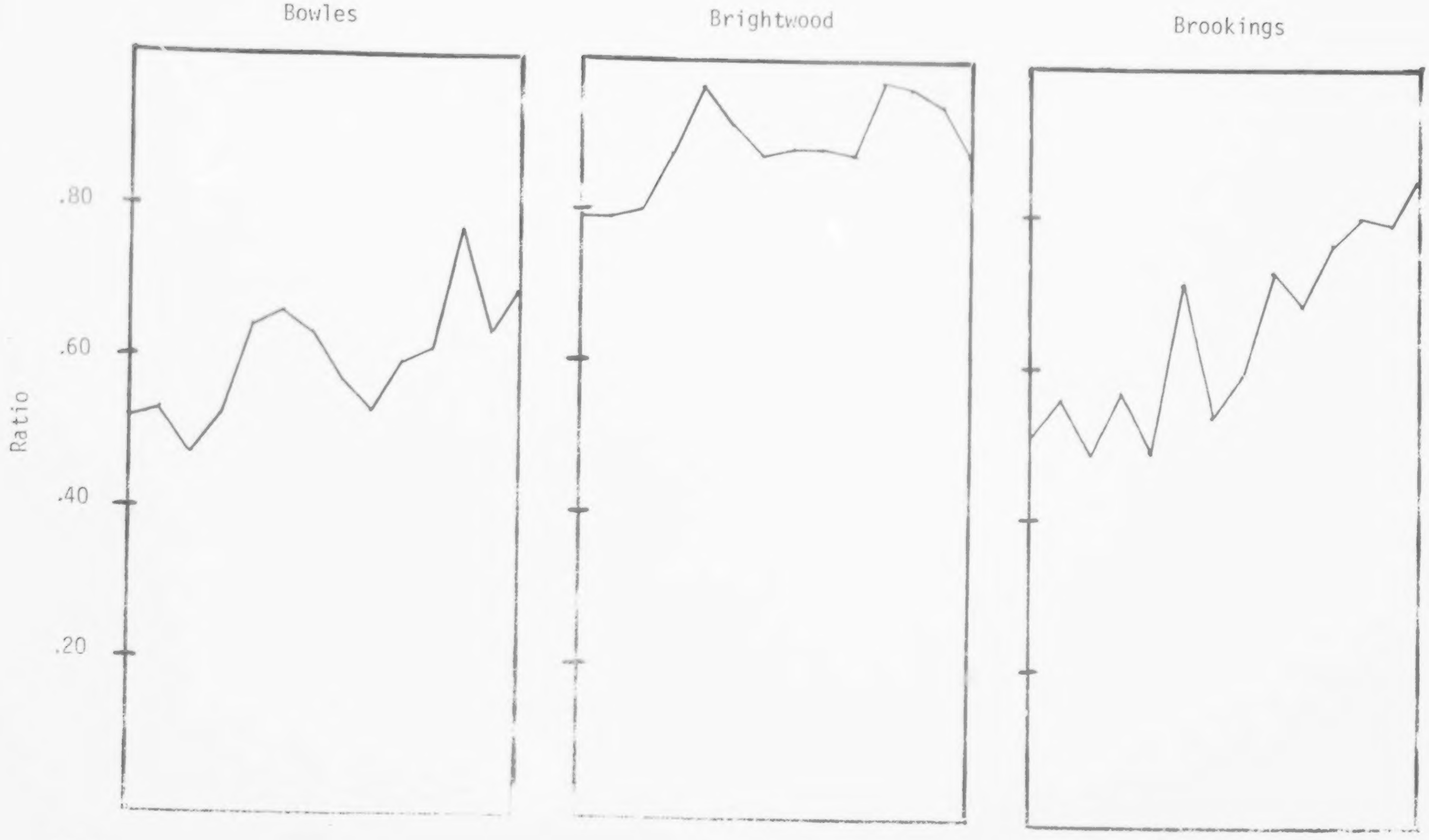


Graph J4 (Cont.)

Ratio of Actual to Expected Cross-Racial Selections by School

Fourteen Testing Periods

(1978-79 -- 1984-85)

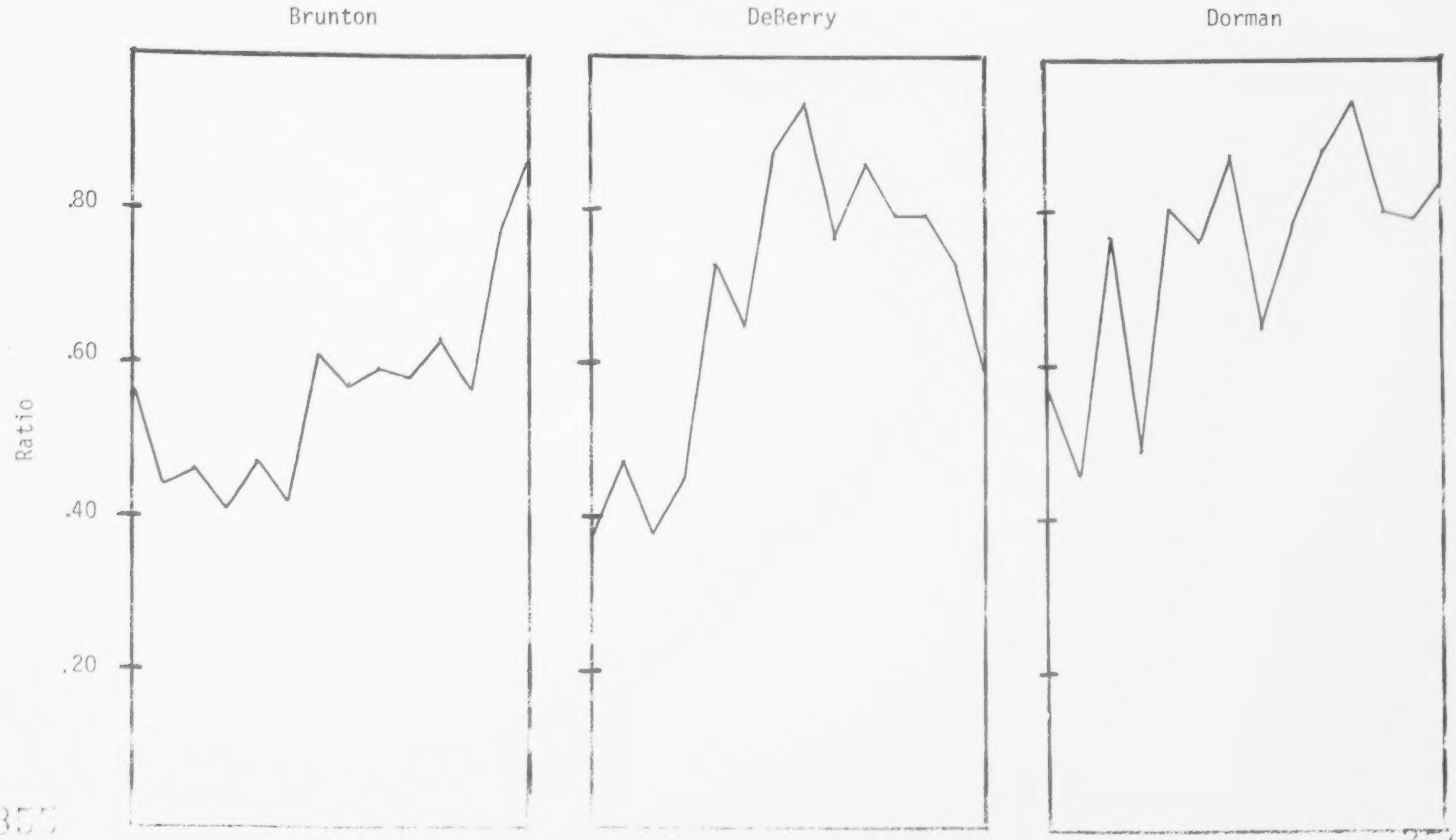


Graph J4 (Cont.)

Ratio of Actual to Expected Cross-Racial Selections by School

Fourteen Testing Periods

(1978-79 -- 1984-85)

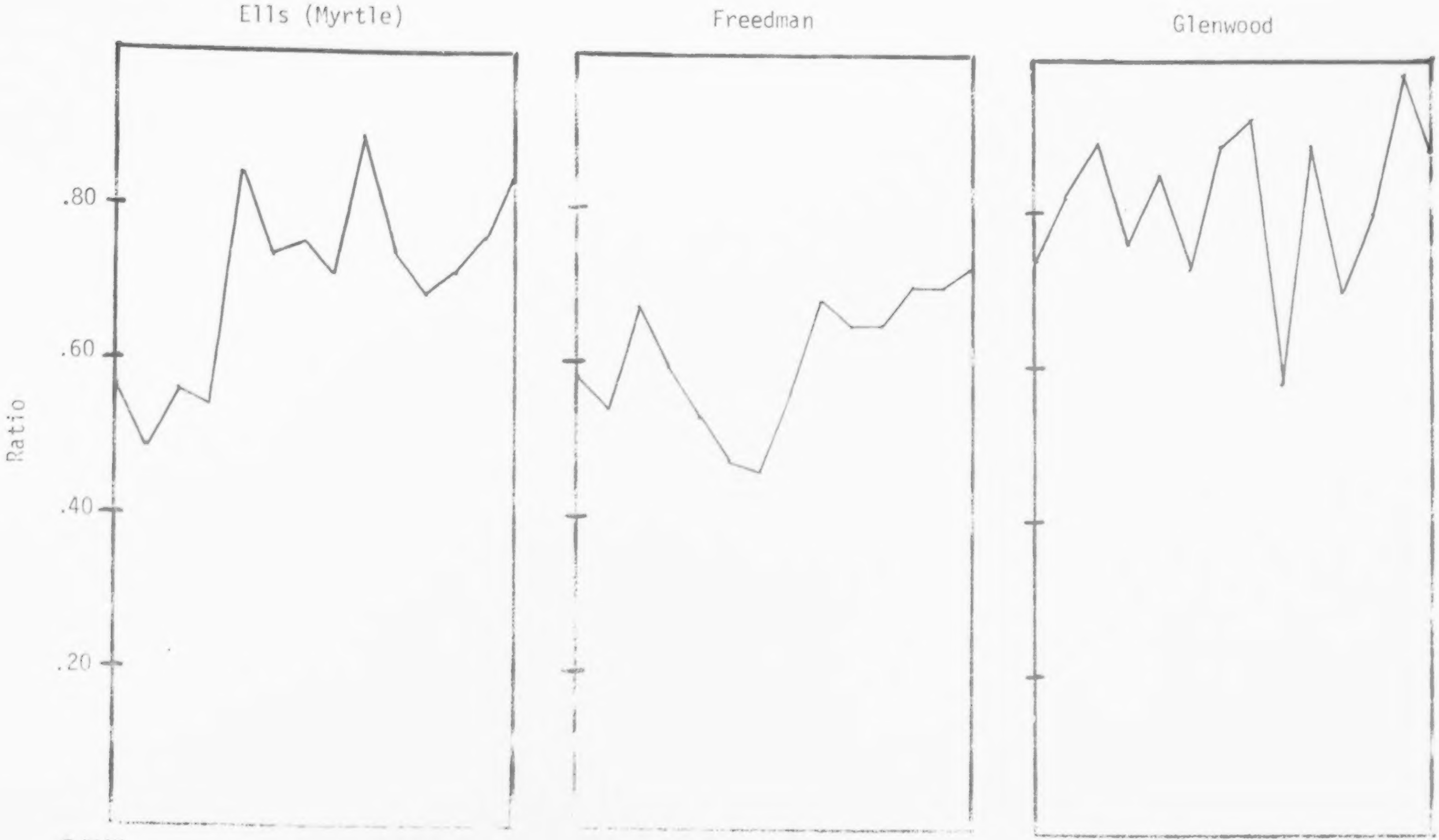


Graph J4 (Cont.)

Ratio of Actual to Expected Cross-Racial Selections by School

Fourteen Testing Periods

(1978-79 -- 1984-85)

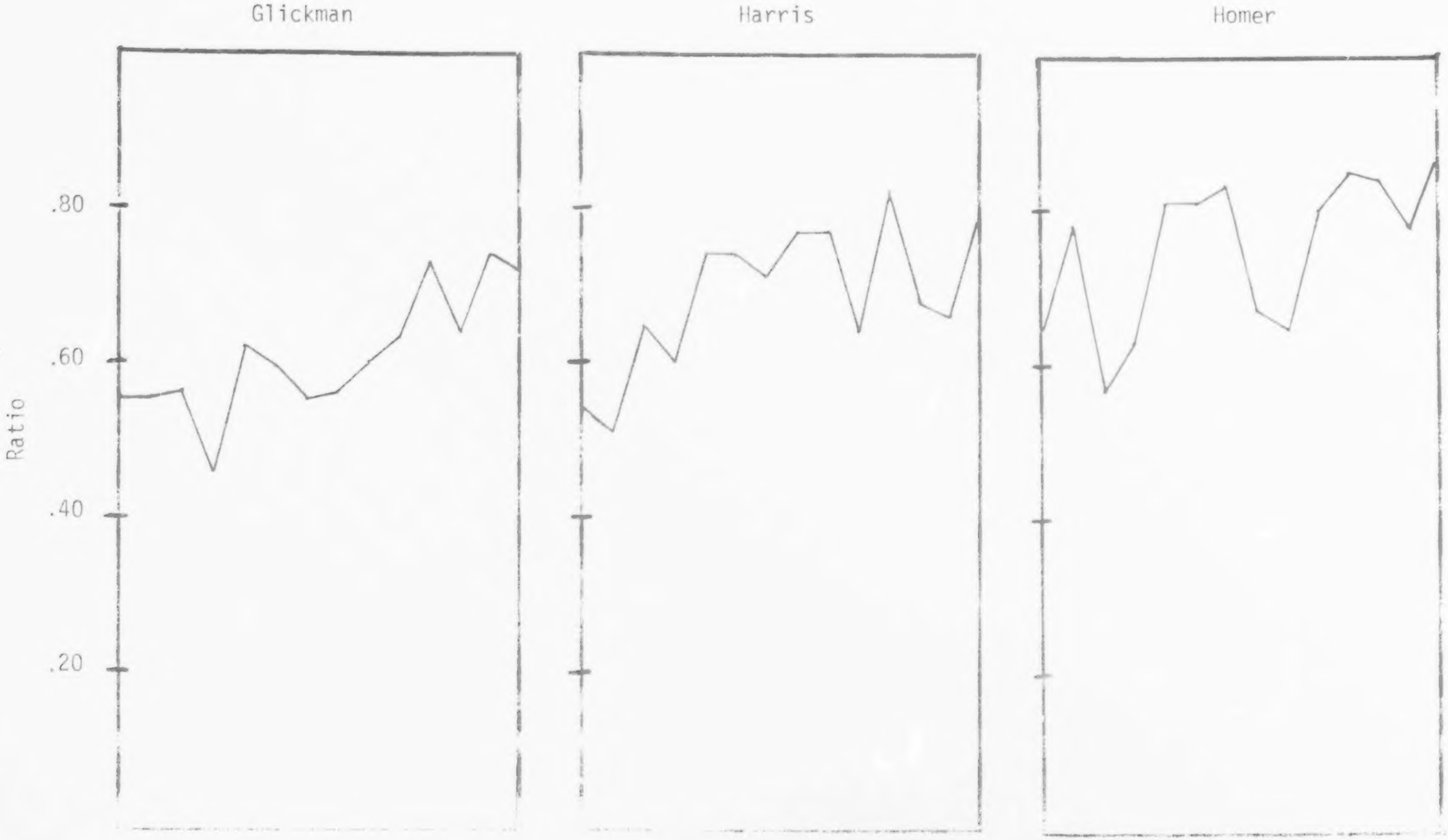


Graph J4 (Cont.)

Ratio of Actual to Expected Cross-Racial Selections by School

Fourteen Testing Periods)

(1978-79 -- 1984-85)

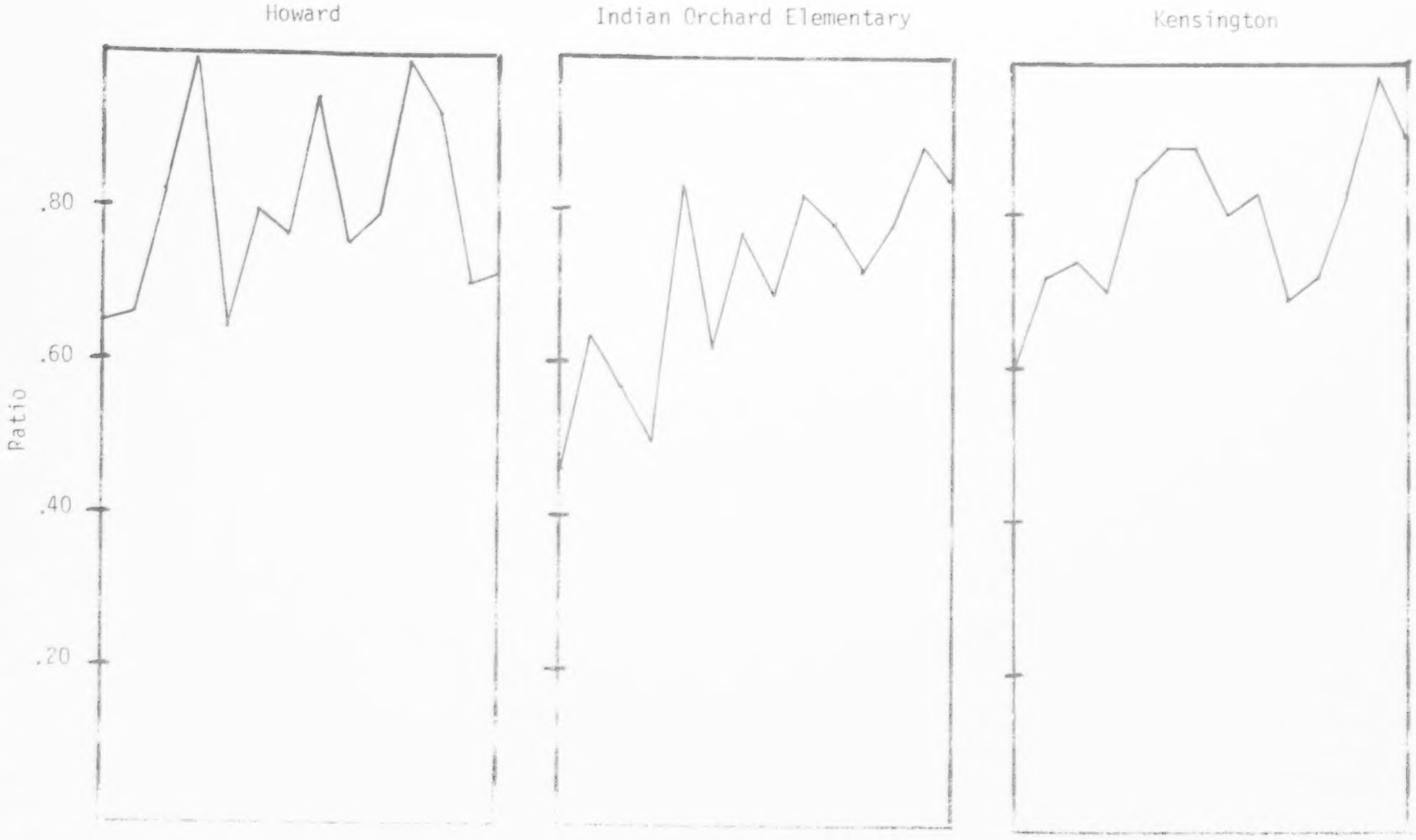


Graph J4 (Cont.)

Ratio of Actual to Expected Cross-Racial Selections by School

Fourteen Testing Periods

(1978-79 -- 1984-85)

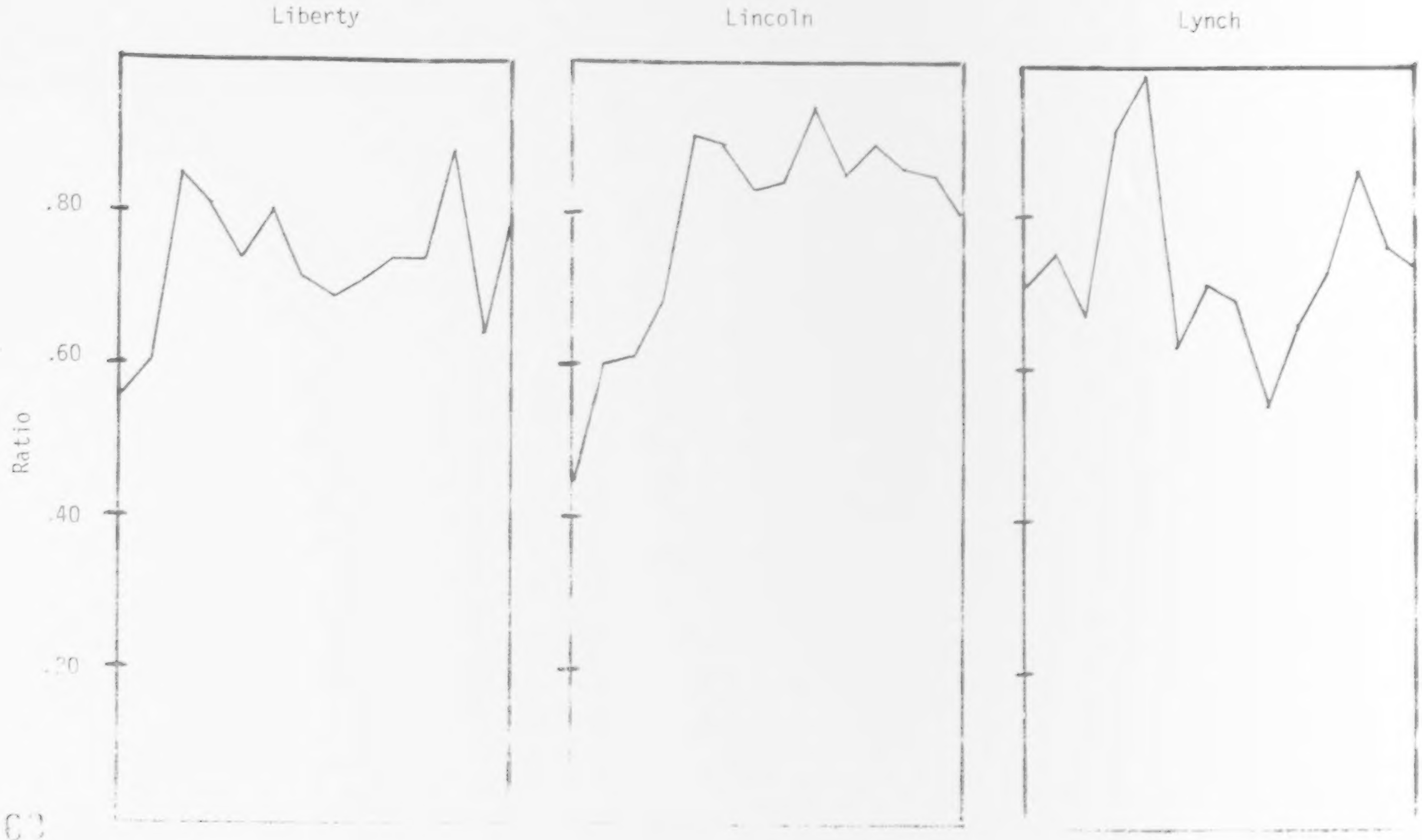


Graph J4 (Cont.)

Ratio of Actual to Expected Cross-Racial Selections by School

Fourteen Testing Periods

(1978-79 -- 1984-85)

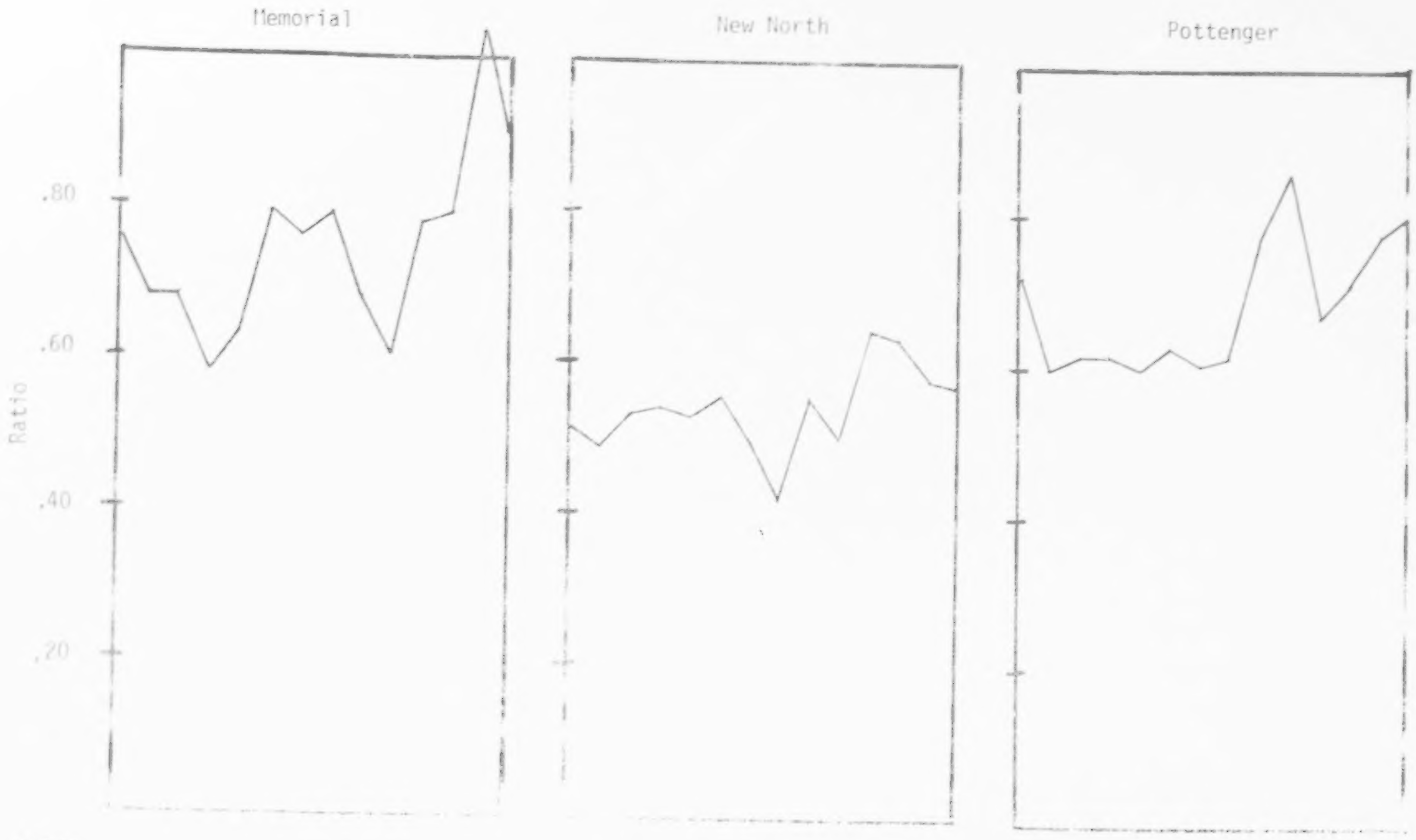


Graph J4 (Cont.)

Ratio of Actual to Expected Cross-Racial Selections by School

Fourteen Testing Periods

(1978-79 -- 1984-85)

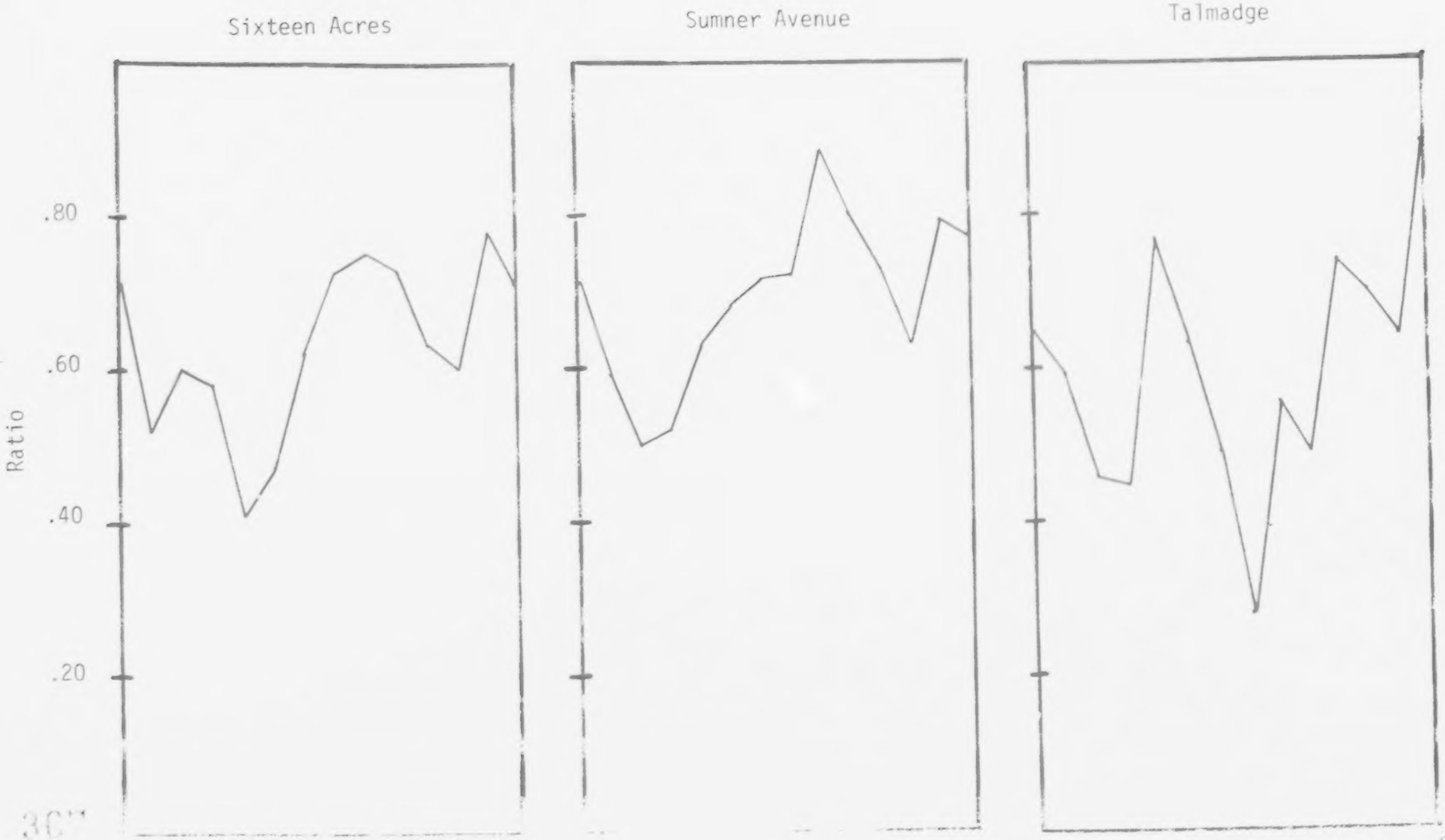


Graph J4 (Cont.)

Ratio of Actual to Expected Cross-Racial Selections by School

Fourteen Testing Periods

(1978-79 -- 1984-85)



Graph J4 (Cont.)

Ratio of Actual to Expected Cross-Racial Selections by School

Fourteen Testing Periods

(1978-79 -- 1984-85)

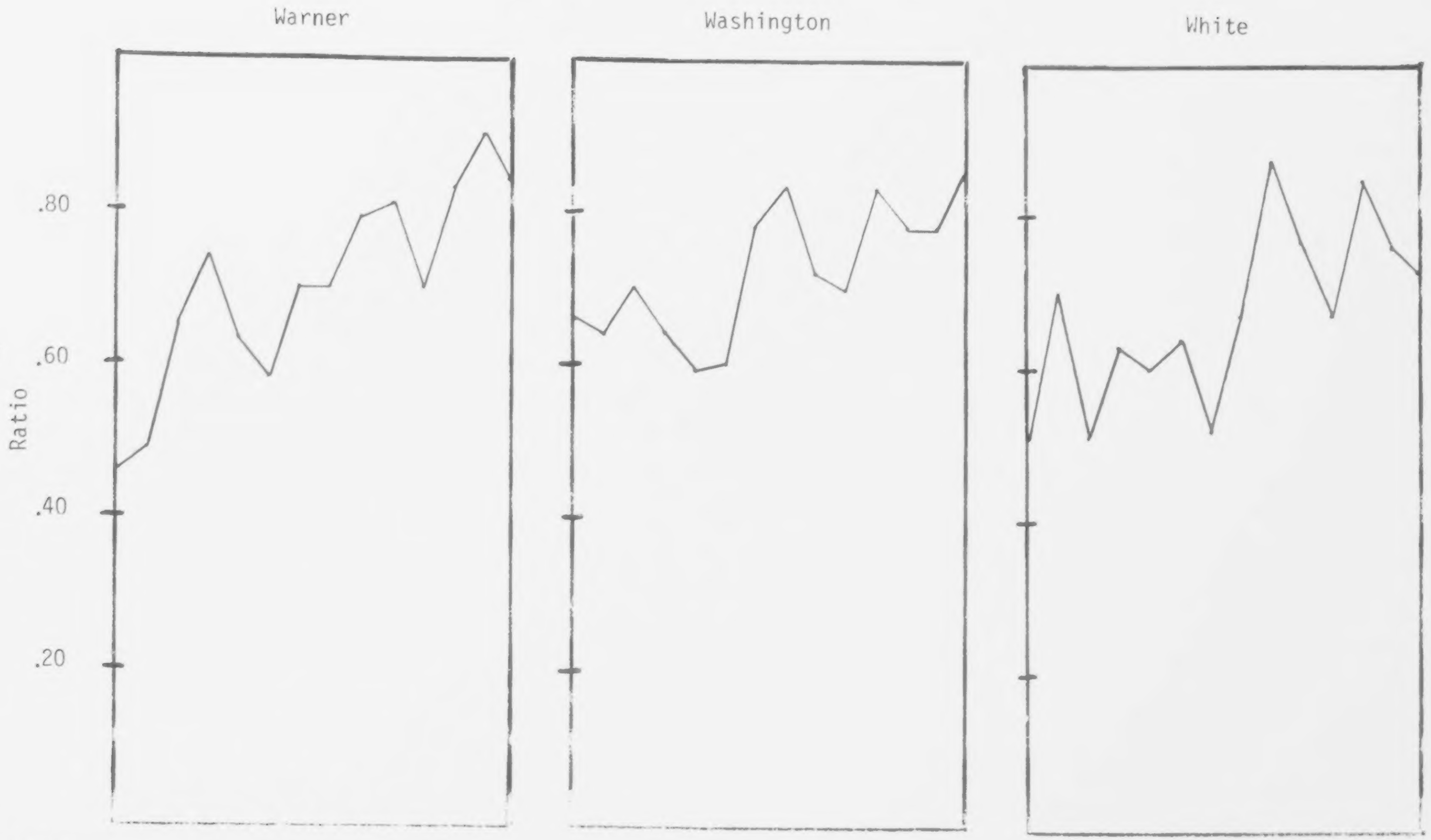


TABLE J13

Ratio of Actual to Expected Cross-Racial Selections by School

(14 Testing Periods)

	Testing Period														
School	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Ave
Arm	.47	.59	.58	.73	.81	.71	.58	.66	.69	.70	.72	.73	.78	.78	.68
Bal	.74	.80	.95	.78	.81	.80	.81	.85	.90	.86	.83	.88	.96	.90	.85
Bea	.68	.63	.73	.56	.48	.41	.46	.73	.86	.60	.67	.71	.82	.77	.65
Bow	.52	.53	.47	.52	.64	.66	.63	.57	.53	.59	.61	.77	.63	.69	.60
Bri	.79	.79	.80	.87	.96	.91	.87	.88	.88	.87	.97	.96	.94	.87	.88
Bro	.51	.56	.49	.57	.49	.71	.54	.59	.73	.69	.77	.80	.79	.85	.65
Bru	.56	.44	.46	.41	.47	.42	.61	.57	.59	.58	.63	.57	.77	.86	.57
DeB	.38	.47	.38	.45	.73	.65	.87	.94	.76	.86	.79	.79	.73	.59	.67
Dor	.57	.46	.77	.49	.80	.76	.87	.65	.78	.88	.94	.80	.79	.83	.74
El-My	.57	.49	.56	.54	.84	.74	.75	.71	.89	.74	.69	.71	.76	.83	.70
Fre	.58	.54	.67	.59	.53	.47	.46	.56	.68	.65	.65	.70	.70	.72	.61
Gle	.74	.82	.89	.76	.85	.73	.89	.92	.58	.89	.70	.80	.98	.88	.82
Gli	.55	.55	.56	.46	.62	.59	.55	.56	.60	.63	.73	.64	.74	.72	.61
Har	.54	.51	.65	.60	.74	.74	.71	.77	.77	.64	.82	.68	.66	.78	.69
Hom	.65	.78	.57	.63	.81	.81	.83	.67	.65	.80	.85	.84	.78	.86	.75
How	.65	.66	.82	.99	.64	.79	.76	.94	.75	.78	.99	.92	.70	.71	.79
IOE	.46	.63	.57	.50	.83	.62	.77	.69	.82	.78	.72	.78	.88	.84	.71
Kns	.60	.72	.74	.70	.85	.89	.89	.80	.83	.69	.72	.83	.98	.90	.80
Lib	.56	.60	.85	.81	.74	.80	.71	.69	.71	.74	.74	.88	.64	.78	.73
Lin	.45	.60	.61	.67	.90	.89	.83	.84	.94	.85	.89	.86	.85	.80	.78
Lyn	.71	.75	.67	.91	.98	.63	.71	.69	.55	.66	.73	.86	.76	.74	.74
Mem	.75	.68	.68	.58	.63	.79	.76	.79	.68	.61	.78	.79	1.04	.90	.75
New	.51	.49	.53	.54	.53	.55	.50	.42	.55	.50	.64	.63	.58	.57	.54
Pot	.72	.60	.62	.62	.60	.63	.61	.62	.77	.86	.67	.71	.78	.80	.69
Six	.71	.52	.60	.58	.41	.47	.62	.73	.75	.73	.63	.60	.78	.71	.63
Sum	.71	.59	.55	.56	.63	.66	.71	.72	.88	.80	.73	.63	.79	.77	.70
Tal	.65	.59	.46	.45	.77	.63	.49	.28	.55	.49	.74	.70	.64	.89	.60
War	.46	.49	.65	.74	.63	.58	.70	.70	.79	.81	.70	.83	.90	.84	.70
Was	.66	.64	.70	.64	.59	.60	.78	.83	.72	.70	.83	.78	.78	.85	.72
Whi	.51	.70	.51	.63	.60	.64	.52	.67	.87	.77	.67	.85	.76	.73	.67

TABLE J14

Slope of the Regression Line of the
Percent of Selections That Were Cross-Racial
and of
the Ratio of Actual to Expected Cross-Racial Selections
By School
(14 Testing Periods)

	Slope	
School	Percent	Ratio
Arm	1.29	1.51
Bal	0.52	0.91
Bea	-0.39	1.33
Bow	1.16	1.31
Bri	-0.24	0.95
Bro	2.19	2.69
Bru	1.63	2.44
DeB	2.01	2.79
Dor	1.82	2.35
El-My	1.77	1.90
Fre	1.21	1.23
Gle	-0.03	0.47
Gli	1.09	1.54
Har	1.12	1.37
Hom	1.37	1.32
How	-0.36	0.63
IOE	2.03	2.50
Kns	2.07	1.46
Lib	0.62	0.61
Lin	0.80	2.42
Lyn	-0.20	-0.20
Mem	0.69	1.74
New	0.50	0.69
Pot	1.00	1.30
Six	1.69	1.27
Sum	1.07	1.41
Tal	1.12	1.32
War	1.66	2.71
Was	0.55	1.54
Whi	1.57	1.88

K. Perceptions: Principals, Teachers, Parents

Questionnaires were mailed to all 40 principals in May and returned by 33 principals for a rate of return of 83 percent, slightly lower than the 34 (85 percent) return of last year. Principals were asked to evaluate how successful they felt the Chapter 636 program at their school was at accomplishing each of five objectives: improving the quality of education, increasing staff input, enabling the school to better meet needs of students, enhancing integration, and increasing parent involvement. Mean success ratings on a seven point scale from 1 (Very Unsuccessful) to 7 (Highly Successful) ranged from 5.42 to 6.58 (see Table K1). Most successful objective, according to principals, was enabling the school to better meet the needs of students while least successful was increasing parent involvement.

Principals were also asked to rate the overall success of their Chapter 636 programs on a 7 point scale from 1 (Very Unsuccessful) to 7 (Highly Successful). Overall rating was better than 6, higher on the elementary level than on the secondary level, (as in the past), and higher than the past two years at both grade levels though still below the peak of 1980-81 (see Table K2). As in the past, principals were most concerned with fiscal restraints caused by Proposition 2½ and insufficient increases in Chapter 636 to keep pace with inflation.

As one principal stated:

> "To improve on a very successful program would require more money and personnel.
>
> Budgets are shrinking and some adjustments should be made so we can continue to maintain highly successful programs."

There is also a continuing concern by some principals regarding inequities created by magnet schools:

> "An increase in our allotment would enable us to enhance our program even more. Some of us have trouble competing, programwise, with magnet schools. As our children are drawn away, the magnet school appropriations go up as our appropriations go down proportionately. There should be some adjustment made for those who lose to magnet programs. This is creating huge inequities throughout the system."

Other comments by principals included the following:

> "More equitable method of publicity for all programs should be developed at the Central Office."
>
> "Keep it coming--We, that is 'the teachers', need all the help they can get."
>
> "This year the allocation for 1985-86 prevents us from keeping totally our present program next year. With increasing salaries and benefits the funds become more and more inadequate."
>
> "The teachers who are responsible for the three parts of our program are giving 100%. They are professional, responsible, creative and dedicated to the progress of the children."
>
> "Our program has broadened the horizons of all our children immensely in two vital areas."
>
> "Hopefully the budget will continue to remain such that our part-time programs will not have to be cut."
>
> "Continued funding including necessary cost of living increases such as salaries, etc. rather than level funding."
>
> "Wonderful program! Helps all children - some directly, some indirectly."

In conversation with principals and this evaluator, no overriding concerns surfaced with the exception of the need for continued funding and increased funding (prior to proposal development) to keep pace with rising salaries and other costs in order not to have to cut back on existing successful programs.

Classroom teachers at all elementary and secondary schools were asked for their perceptions of the Chapter 636 program on the whole as well as their perceptions on specific aspects of their Chapter 636 program (as given in previous sections of this evaluation report). Questionnaires were distributed to all schools in May and were returned by 349 elementary, and 191 secondary classroom teachers representing all schools for a rate of return of approximately 53% (80% elementary, 33% secondary). Teachers were asked to judge the effectiveness of the Chapter 636 program at their school at accomplishing six objectives: improving the quality of education, increasing staff input, enabling the school to better meet needs of students, enhancing integration, increasing parent involvement, and providing good coordination between city and Chapter 636 staff. On the elementary level, the highest rating (ranging from 1: Very Unsuccessful to 7: Highly Successful) was attained by the third objective, enabling the school to better meet student needs, while the least successful objective was the fifth, providing opportunities for parent involvement (see Table K3). Individual school success ratings on these objectives ranged from a high of 7.00 at two schools to a low of 3.50 on the parent input objective. Seven schools had ratings of less than 5 on the parent input objective while three schools had ratings of less than 5 on the teacher input objective. At these schools in particular, two of which had ratings of less than 5 on both objectives, it would seem that greater involvement of parents and teachers in Chapter 636 programs, activities, or decision making would be warranted though across-the-board there would seem to be a need for greater parental involvement.

Elementary classroom teachers were also asked to rate the overall effectiveness of the Chapter 636 program(s) in their school on a scale from 1 (Very Unsuccessful) to 7 (Highly Successful). Mean overall rating this year was 6.26, the highest rating ever (see Table K4). Ratings ranged from a high of 6.92 to a low of 5.17. Fourteen schools had a higher rating this year than last year and six schools had their highest ratings ever. Largest positive rank order changes over last year, indicative of much more positive perceptions of Chapter 636 programs this year, came at DeBerry (+21), Dorman (+16) and Freedman (+16), while White Street School, with the highest overall success rating this year, has consistently had one of the most successful Chapter 636 programs, according to teachers, among the top ten programs every year and with the highest average ranking over 7 years (4.71).

Success ratings of secondary school classroom teachers, across the board, were, as in the past, less positive than those of elementary teachers (see Table K5). However, as with elementary teachers, the most successful objective was enabling the school to better meet needs of students, though the mean success rating of 5.37 was almost one point lower than the elementary rating, while the least successful objective was the parent input objective, more than one point lower than the rating by elementary school teachers. Indeed, four secondary schools had parent input success ratings lower than the midpoint of 4, with the rest below 5, clearly indicating a need for greater parent involvement in Chapter 636 programs, activities, or planning. Involvement of staff in Chapter 636 program planning was the second lowest ranked objective at the secondary level with a mean success rating of only 4.68, fully 1.4 points below the success rating on the elementary level, while six of the ten schools had success rating below 5. There is thus a need, once again, to increase staff involvement in Chapter 636 program planning at the secondary level.

Secondary teachers were also asked to rate the overall effectiveness of their Chapter 636 program on a scale from 1 (Very Unsuccessful) to 7 (Highly Successful). Ratings ranged from a high of 6.40 to a low of 4.50 (see Table K6). Average rating was slightly below that of last year and four schools had a higher rating this year compared to last year. The most successful program over time, according to teachers, has been Chestnut, the second highest ranked program this year with an average ranking of 2.0 over the four-year period.

All schools were invited to voluntarily survey parents regarding the Chapter 636 programs in their schools. Parents at all magnet schools have been surveyed for several years. For parent perceptions of the magnet school program at the ten magnet schools, see Section G of this evaluation report.

Fifteen non-magnet schools surveyed parents in regards to the special Chapter 636 programs at their schools this year, an increase of five over last year. Totally, 548 parents responded compared to 326 last year and 229 the previous year, more than doubling in three years. Parent perceptions, as presented in Table K7, were very positive as more than 90 percent of all the parents surveyed felt that there was a need for the program, felt that the Chapter 636 programs improved the quality of education, felt that the programs should be continued, felt that their children were receiving a better education as a result of Chapter 636 programs, and indicated that their children enjoyed participating in the Chapter 636 programs. Only 82%, however, were aware that the Chapter 636 programs were available, the lowest percentage of the eight response items, indicating once again the need for more parent involvement in Chapter 636.

Compared to last year, parent perceptions were the same or slightly higher on three items and lower on four items (see Table K8). Largest decrease came on the awareness item, decreasing to 82% from 91% last year.

Parents were also asked to list any additional programs that they would like to see funded under Chapter 636. Most frequently listed, by far, were computer programs followed more distantly by art programs and physical education programs.

Finally, parents were asked for comments or suggestions pertaining to their Chapter 636 programs. Comments were very positive as evidenced by the sample of comments following:

> "My son loves the reading enrichment. The teacher does an excellent job of really helping children understanding the importance of reading-and makes it fun too!"

> "My child loves the music program very much! He has made numerous comments about it since the beginning of school. Any program that can get a child excited about learning is terrific!"

> "Any program which gives added insight into an area or added incentive to a child is important. They broaden the learning experience as well as give children opportunities they may never have had outside the school environment."

> "Reading enrichment programs have stimulated interest in reading, and have made learning pleasurable."

> "My child has been fortunate to be able to take advantage of all three of the available programs at this school. As a very gifted second grader, these programs have made the difference for him between an excitement about learning and a boredom with school. These programs and their excellent teachers are a major reason I am pleased with what the Spfld. public schools offer and achieve with a difficult child."

"My child talks more about these programs than anything else at school. I hope we can keep these programs so other children can enjoy them also."

"My child participated in the Science and Art programs but unfortunately missed out on "music." He does enjoy music and has a natural talent for art which helps in his self expression. He put his whole being into the Science Fair and learned very much from this experience. Thank you."

"I didn't realized that my daughter's reading group was supported by the Chapter 636 program, but obviously I feel that any additional programs are of benefit to the students, including additional reading groups."

"I think music and art are important for children to help release pent-up energy and help in expressing creativity. Music and art are also important in social development especially when children are given the opportunity to work together or discuss the activities."

"My son has improved greatly from your school, he's learned more and seems more interested in his subjects. I'm sure a great deal has to do with the Chapter 636 programs."

"Art and music are vital to the total growth of a child-keep up the good work!"

"My son comes home singing after having music class. He thoroughly enjoys it and takes great pride in what he has learned. The art class has stimulated his imagination. He teaches his younger brother what he studied."

"I think the programs should continue. It helps children to enjoy school more. There's more of a variety in their learning."

"My daughter was very shy. It seems to have made her more out-going. She's not as timid as she use to be. I'm sure it has alot to do with the programs that Chapter 636 offered."

"I think these programs are needed and very useful for the children in helping them to grow academically and socially. I hope we are able to continue them in our schools."

"My child seemed to enjoy all of the programs offered to him. I think it gives the students an opportunity to broaden their interests and to make them better prepared for what they want to do in later life."

"My child has found school to be more interesting and challenging because of his participation in these programs."

"The children appreciate any extra time and attention spent with them to help enrich the regular program offered. My child finds it fun and slightly difficult at the same time.

> "I am very pleased with the enrichment program. I know it made a difference with my son, 4 years ago, and I am pleased to say my daughter enjoys it and is benefiting from the program as well."

Recommendations

1. According to principals and to teachers at both the elementary and secondary levels, the least successful aspect of Chapter 636 has been at increasing the involvement of parents in school activities. Though there has been an increased involvement of parents in the Chapter 636 evaluation process, there was a noticeable decline in the percentage of parents who have indicated awareness of Chapter 636 programs. It would seem that a number one priority of principals, Chapter 636 teachers, and classroom teachers should be to increase parental involvement in school activities. Perhaps one objective of the Spring administrators' workshop should be at providing in-service training for administrators on how to successfully involve parents in school activities, or perhaps Chapter 636 funding for a workshop, consultants or attendance at a conference related to this topic could be initiated next year.
2. The second least successful objective of Chapter 636 on the secondary level, according to teachers, was involvement of staff in Chapter 636 program planning. There is thus still a very definite need for secondary principals to make a firm commitment to involve all staff members in the planning of Chapter 636 programs. As schools with lower teacher participation tend to have lower perceptions of the value of Chapter 636 programs, it is important that all teachers become party to the decision-making process.

TABLE K1

Principals' Perceptions of the Chapter 636 Program

Success Rating of Overall Objectives

Seven-Point Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

Objective	N= 33 Mean Success Rating
1. Improving the quality of education at this school	6.55
2. Increasing opportunities for staff to participate in school program planning	6.21
3. Enabling this school to better meet the educational needs of its students	6.58
4. Enhancing racial integration at this school	6.52
5. Increasing parent involvement in school activities	5.42

TABLE K2

Principals' Ratings of Their Chapter 636 Programs

Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

Seven-Year Comparison

	Rating						
Level	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85
Elementary	6.65	6.63	6.76	6.54	6.27	6.44	6.50
Secondary	5.32	6.00	6.43	6.25	6.00	6.00	6.33
TOTAL	6.41	6.51	6.71	6.47	6.21	6.35	6.47

TABLE K3

Elementary Classroom Teacher Perceptions of Chapter 636 Programs by School

Success Rating of Overall Objectives

Seven Point Scale: 1 (Very UNsuccessful) -- 7 (Highly Successful)

		Objectives					
School	N*	1. Improving the quality of education at this school.	2. Providing opportunities for staff input into deciding what educational needs should be addressed by Chapter 636 at this school.	3. Enabling this school to better meet the educational needs of its students.	4. Enhancing racial integration at this school.	5. Providing opportunities for parent involvement in school activities	6. Providing good coordination of effort between Chapter 636 staff and classroom teachers.
Arm	18	6.50	5.83	6.33	6.06	6.06	5.94
Bal	7	6.14	6.57	6.00	5.83	5.14	5.29
Bea	6	6.67	6.83	6.83	6.20	5.40	6.33
Bow	10	6.50	6.70	6.60	6.50	6.20	6.70
Bri	6	5.50	4.50	5.50	5.50	4.67	4.83
Bro	10	5.50	4.60	5.70	4.90	4.89	5.50
Bru	9	6.33	6.33	6.44	6.67	5.44	6.56
DeB	14	6.64	6.57	6.64	6.57	5.93	6.43
Dor	9	7.00	6.33	6.78	6.22	5.11	6.56
Ell	7	5.29	5.71	6.00	5.57	4.86	5.86
Fre	9	6.89	6.56	6.89	6.38	5.75	7.00
Gle	15	6.60	6.67	6.71	5.80	5.21	6.67
Gli	11	6.09	5.82	5.82	5.18	4.40	5.91
Har	12	5.00	5.33	5.00	5.00	3.50	4.92
Hom	8	7.00	6.88	7.00	6.75	5.75	6.63
How	21	6.62	6.00	6.70	6.78	6.00	6.21
IOE	11	6.45	6.18	6.45	6.36	5.10	6.55
Kns	15	6.47	6.00	6.33	5.73	5.50	5.73
Lib	5	6.60	6.60	6.60	5.25	6.20	6.40
Lin	21	6.67	6.43	6.77	5.72	5.52	6.43
Lyn	11	6.55	6.56	6.56	6.60	6.33	6.70
Mem	6	6.83	6.83	6.83	6.83	6.50	6.83
New	15	6.33	5.27	6.13	5.93	4.93	5.40
Pot	21	5.71	5.71	5.67	5.75	5.10	5.15
Six	10	6.70	6.78	6.50	6.50	6.10	6.80
Sum	14	5.64	4.93	5.64	5.29	4.64	5.29
Tal	12	6.33	6.42	6.58	5.42	5.18	6.42
War	15	6.20	6.20	6.33	5.93	5.47	6.20
Was	8	6.00	5.75	6.38	5.71	5.43	6.00
Whi	13	6.85	6.69	6.92	6.67	6.64	6.92
TOTAL	349	6.32	6.08	6.34	5.97	5.42	6.11

***Not all teachers responded to each item**

TABLE K4

Elementary Classroom Teachers Mean Ratings
of Their School Chapter 636 Programs
Six-Year Comparison
Seven-Point Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

School	Rating							Rank						
	77-78	78-79	80-81	81-82	82-83	83-84	84-85	77-78	78-79	80-81	81-82	82-83	83-84	84-85
Arm	6.08	6.68	6.67	6.24	6.60	6.35	6.18	14	4	4	9	5	13	16
Bal	4.63	4.90	5.25	5.43	6.40	6.50	6.14	27	27	26	23	8	9	17
Bea	5.90	5.78	6.17	7.00	6.50	7.00	6.83	16	19	11	1	6	1	3
Bow	6.29	6.68	6.42	6.19	6.14	6.53	6.50	8	4	6	12	12	8	11
Bri	6.33	5.91	5.92	6.67	6.43	6.18	5.17	7	16	16	3	7	17	24
Brk	6.22	5.92	5.36	4.80	5.80	4.44	5.60	10	15	24	26	17	26	20
Bru	5.82	5.88	6.08	6.33	6.50	6.67	6.56	19	17	14	4	6	6	9
DeB	6.55	6.83	6.71	7.00	7.00	4.70	6.71	4	1	3	1	1	25	4
Dor	5.85	5.53	6.25	5.92	6.00	5.75	6.67	18	22	9	16	15	22	6
Ell	6.20	6.40	5.50	5.67	6.29	6.33	5.57	11	8	23	22	10	14	21
Fre	5.07	5.17	6.00	6.22	5.90	6.00	6.71	25	26	15	11	16	20	4
Gle	6.63	6.61	6.00	6.22	6.64	5.67	6.57	3	6	15	11	4	23	8
Gli	6.79	6.73	6.08	6.18	6.17	6.00	6.45	2	3	14	13	11	20	12
Har	5.78	6.00	6.22	6.38	1.55	6.38	5.42	20	14	10	5	24	12	22
Hom	6.11	6.40	6.25	6.18	6.50	6.30	6.88	13	8	9	13	6	15	2
How	6.40	6.00	6.90	5.29	6.05	5.95	6.50	6	14	2	24	14	21	11
IDE	5.88	6.14	5.89	5.73	5.46	6.40	6.55	17	13	18	21	19	11	10
Kns	4.27	6.64	6.15	6.27	6.33	6.88	6.33	28	5	12	7	9	2	14
Lib	5.88	6.33	6.36	5.88	6.00	6.43	6.25	17	11	7	17	15	10	15
Lin	6.94	6.38	5.88	6.50	6.50	6.85	6.57	1	9	19	4	6	3	8
Lyn	6.22	6.20	6.00	6.25	5.00	6.20	6.70	10	12	15	8	22	16	5
Mem	6.22	5.30	5.63	5.86	6.86	6.78	6.83	10	23	22	2	3	5	3
Mor	6.50	6.75	6.67	----	----	----	----	5	2	4	--	--	--	--
Myr	6.14	5.83	6.44	6.08	----	----	----	5	18	5	14	--	--	--
New	5.23	5.88	5.26	6.00	6.06	6.06	5.87	23	18	25	15	13	19	19
Pot	5.00	6.37	6.31	5.25	4.14	4.88	5.60	26	10	8	25	23	24	20
Six	5.64	5.25	5.78	5.78	5.11	6.81	6.60	21	24	21	20	21	4	7
Sum	6.00	5.56	5.90	----	6.60	----	5.29	15	21	17	--	5	--	23
Tal	6.15	5.64	6.11	5.82	6.40	6.56	6.33	12	20	13	19	8	7	14
War	5.16	5.18	5.86	5.86	5.64	6.13	6.36	24	25	20	18	18	18	13
Was	5.38	5.64	6.00	5.67	5.33	6.33	6.13	22	20	15	22	20	14	18
Whi	6.25	6.50	7.00	6.23	6.91	6.85	6.92	9	7	1	10	2	3	1
TOTAL	5.85	6.04	6.10	6.02	5.96	6.16	6.26	--	--	--	--	--	--	--

TABLE K5

Secondary Classroom Teacher Perceptions of the Chapter 636 Programs

By School

Success Rating of Overall Objectives

Seven-Point Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

School	N*	Mean Rating 1. Improving the quality of education at this school	2. Providing opportunities for staff input into deciding what educational needs should be addressed by Chapter 636 at this school	3. Enabling this school to better meet the educational needs of its students	4. Enhancing racial integration at this school	5. Providing opportunities for parent involvement in school activities	6. Providing good coordination of effort between Chapter 636 staff and classroom teachers
Che	17	5.94	4.94	5.82	4.94	4.71	5.24
Dug	16	5.81	5.33	5.88	5.07	3.64	5.38
For	10	5.89	5.00	5.78	4.44	4.30	5.33
Ken	5	6.20	6.60	6.40	6.00	5.00	6.00
Kil	28	5.42	4.64	5.73	4.76	4.20	4.62
Van	24	4.61	4.00	4.78	4.78	4.61	4.52
Cla	27	5.26	4.58	5.26	4.40	3.76	4.28
Com	21	4.40	4.15	4.47	4.16	3.88	3.89
Put	29	5.31	4.28	5.17	4.46	3.88	4.38
Tec	14	5.64	5.71	5.71	5.23	4.00	5.64
Total	191	5.31	4.68	5.37	4.70	4.13	4.72

*Not all teachers responded to each question

TABLE K6

Secondary Classroom Teachers' Mean Overall Rating
of the School Chapter 636 Programs
Four-Year Comparison

Seven-Point Scale: 1 (Very UNsuccessful) to 7 (Highly Successful)

	Mean Rating				Rank			
School	81-82	82-83	83-84	84-85	81-82	82-83	83-84	84-85
Che	5.44	6.00	6.36	5.76	4	1	1	2
Dug	3.83	5.00	4.33	5.50	8	6	10	4
For	3.13	4.43	6.00	5.44	9	10	2	5
Ken	4.25	4.50	5.20	6.40	7	9	3	1
Kil	4.47	4.89	4.60	4.92	6	7	9	7
Van	----	5.23	5.14	4.70	-	4	4	8
Cla	5.80	5.16	4.75	4.68	3	5	8	9
Com	6.33	4.60	4.79	4.50	2	8	7	10
Put	4.78	5.81	5.10	4.96	5	2	5	6
Tec	6.50	5.61	5.06	5.62	1	3	6	3
TOTAL	4.36	5.26	5.18	5.07	-	-	-	-

TABLE K7

Parent Perceptions of Chapter 636 Programs

At Schools Opting for Parent Surveys

		Percent of Responses "Strongly Agree" or "Agree"															
	N=*	35	31	16	20	56	41	25	72	20	11	6	20	37	76	82	548
Objective		Bal	Bow	Bro	Bru	DeB	Dor	Gle	Har	Hom	How	IOE	Lib	Mem	Pot	Whi	TOTAL
1. I was aware that the Chapter 636 program(s) listed was (were) available at this school.		94%	77%	75%	95%	79%	70%	67%	84%	95%	100%	100%	76%	91%	78%	83%	82%
2. I feel that there was a definite need at this school for the Chapter 636 program(s).		100%	100%	81%	100%	100%	100%	100%	99%	95%	100%	100%	100%	97%	96%	94%	93%
3. The Chapter 636 program(s) helped to improve the quality of education at this school.		100%	97%	100%	100%	96%	97%	100%	99%	100%	100%	100%	95%	94%	95%	99%	98%
4. The Chapter 636 program(s) should be continued next year, if possible.		100%	100%	100%	100%	96%	100%	100%	99%	100%	100%	100%	100%	100%	99%	98%	99%
5. My child seems to enjoy going to school more because of the Chapter 636 program(s).		91%	90%	88%	95%	93%	76%	96%	89%	80%	100%	100%	82%	80%	87%	91%	88%
6. Because of the Chapter 636 program(s) offered at this school, I feel that my child is receiving a better education.		94%	97%	94%	100%	92%	85%	80%	97%	90%	100%	100%	89%	92%	93%	96%	93%
7. My child has enjoyed participating in the Chapter 636 program(s) at this school.		94%	93%	100%	100%	96%	85%	100%	97%	100%	100%	100%	94%	91%	96%	95%	95%
8. As a result of the Chapter 636 program(s) my child seems more friendly toward children of other cultures.		91%	96%	86%	79%	94%	71%	84%	77%	80%	91%	100%	78%	65%	91%	79%	83%

*Not all parents responded to each question

TABLE K8

Parent Perceptions of Chapter 636 Programs
At Schools Opting for Parent Surveys
Four-Year Comparison

		Percent of Responses "Strongly Agree" or "Agree"			
	N=*	203	229	326	548
	Statement	1981-82	1982-83	1983-84	1984-85
1.	I was aware that the Chapter 636 Program(s) listed were available at this school.	---	87%	91%	82%
2.	I feel that there was a definite need at this school for the Chapter 636 programs that were provided.	98%	94%	97%	98%
3.	The Chapter 636 program has helped to improve the quality of education at this school.	97%	96%	97%	98%
4.	The Chapter 636 program should be continued next year, if possible.	97%	96%	99%	99%
5.	My child seems to enjoy going to school more because of the Chapter 636 program(s).	---	---	---	88%
6.	Because of the Chapter 636 program offered at this school, I feel that my child is receiving a better education.	94%	94%	94%	93%
7.	My child has enjoyed participating in the Chapter 636 program(s) at this school.	99%	90%	97%	95%
8.	Because of the Chapter 636 program my child seems more friendly toward children of other cultures.	---	---	86%	83%

*Not all parents responded to each question.

TABLE K9

Additional Programs Parents Would Like to See

Funded Under Chapter 636

In Priority Order

Rank	Program
1.	Computer Enrichment
2.	Art Enrichment
3.	Physical Education Enrichment
4.	Reading Enrichment
5.	Math Enrichment
6.	Foreign Language Enrichment

Summary Report

The Chapter 636 allocation for 1984-85 totaled over $1.8 million. Approximately $113,000, or 6% of the total budget, was allocated for the administrative and evaluative component. Some funding was also targeted for magnet planning and new desegregation efforts. Of the remaining funds, approximately 75% went to the elementary schools while 25% went to secondary schools.

The high level of parent participation in the needs assessment/proposal development process recorded last year was not sustained this year as only 277 parents participated in this process compared to 435 last year. However, over 900 parents participated in the evaluation of Chapter 636 programs, a considerable increase over last year.

As in prior years, most of the Chapter 636 budget went into staff salaries for 67 teachers and 34 paraprofessionals. Minority composition of professional staff was the lowest ever (only 7%), but minority composition of paraprofessional staff (32%) was the highest ever.

Greatest emphasis of Chapter 636 programs was in reading/ language arts, though amount of teaching time in this area decreased to 37%, the lowest in six years, while emphasis in mathematics was maintained at the highest level yet. Emphasis of arts in education programs increased to the highest level yet.

The number of students served by Chapter 636 teachers and aides varied considerably. The racial distribution of the students served was usually representative of the school population, but there was still a disproportionate number of white students in enrichment programs (though the disproportion was the smallest ever) and a disproportionate number of minority students in basic skills programs (though this disproportion was also the smallest ever).

Chapter 636 programs met with varying success in meeting five system-wide objectives over a three year period beginning in 1982-83. While the achievement gap between majority and minority students has not declined, white, black, and Hispanic students all recorded higher obtained achievement than anticiapted achievement this year. There were large increases in the numbers of non-Hispanic students enrolled in District VI schools over the three years, from 77 in 1982-83 to 216 in 1984-85. There has as yet been little progress made in improving the gender and racial balance in the high schools, though hopefully the opening of the new Central High School in 1986 will change this. Parent involvement in the Chapter 636 needs assessment/proposal development process improved in 1983-84 but declined last year, but parent involvement in the Chapter 636 evaluation process increased over the three years. Elementary teacher participation remained high, but secondary classroom teacher participation has room for improvement. Finally, progress has continued in the integration of students as the percentage of cross-racial selections increased over the three-year period.

Chapter 636 funding in 31 schools was allocated for reading/language arts programs. Programs were of either basic skills, enrichment, or total-school design. Primary objective was that eighty percent of the students served would show month-for month or greater improvement. Totally, 78% of the students in basic skills programs, 61% of the students in enrichment programs, and 55% of the students in total school programs met or surpassed the objective. Fifty percent of the students showed improved attitude toward reading. Teacher rating of these programs were very high, averaging approximately 6.0 on a 7 point rating scale.

Chapter 636 funding in 15 schools was allocated for math programs this year. Primary objective was that eighty percent of the students served would show month-for-month or greater improvement. Totally, 48% of the students in basic skills programs, 53% of the students in enrichment programs, and 48% of the students in total school programs met or surpassed the objective, the lowest percentages ever in each case. While this lower level of success could be attributed to less successful programs, the change in testing instruments this year and the use of different levels of the instrument could also be factors.

Chapter 636 funding at five schools focused on career awareness. Objective was that eighty percent of the students served would demonstrate increased knowledge of career options as determined by results of the Occupational Questionnaire. Totally, 75% of the students had an improved score from pretest to posttest. Student perceptions of the value of the program were very positive. According to classroom teachers, however, the career programs were only fairly successful. The programs were not particularly successful in providing ideas for teachers for infusing career awareness into their daily teaching.

Eighteen schools funded one or more programs in the area of cultural enrichment which included art, music, and theatre arts programs. Most schools also received funding for field trips or performances. Objectives of Chapter 636 art programs were that students would improve their skills in using art media and that students would become more aware of the contributions of other cultures to art and would have a greater tendency to form cross-racial friendships as a result of regular opportunities to work together with other students on various art activities. According to classroom teachers, the art programs were very successful at increasing student interest and enthusiasm for art but were less successful at increasing student exposure to art of other cultures. There was also some concern with lack of sufficient funding for a variety of art materials. According to sociogram results, the cross-racial selection rate at schools with art programs did not improve this year, as the CRS rate in schools with art programs was equal to that of last year.

Nineteen schools funded Chapter 636 music resource teacher programs. Objectives of these programs were that students would demonstrate improved mastery of music concepts, would become more aware of the contributions of other cultures to music, and would show an increased tendency to form cross-racial friendships. Totally, and at nine of twelve schools tested, scores on the Music Achievement Test were higher this year than last year, an indication of improved understanding of music concepts, though students are still below the norm on pitch discrimination and interval discrimination. Cross-racial racial selection rates increased totally and at 11 schools with music programs. Perceptions of classroom teachers were generally positive, though at a few schools teachers felt that more emphasis was needed in the area of music concepts and less emphasis was needed on rote singing.

The theatre arts program at New North was designed to complement and enhance any area of the curriculum. According to classroom teachers there, the program was successful. Sociogram results, however, did not improve as expected.

Students at many elementary and secondary schools participated in field trips which were underwritten entirely or partially by Chapter 636. Objective was to provide effective educational experiences for students outside the classroom setting. According to classroom teachers the field trips were highly successful, with most field trips rated at 7.00 on a seven point rating scale.

Nine schools had one or more Chapter 636 funded foreign language programs in operation last year. The Amity Scholar Program was funded at Classical, Commerce, and Tech, conversational Spanish programs were funded at Sixteen Acres and Sumner, Spanish maintenance programs were funded at Sixteen Acres, White, and Van Sickle, and bilingual home-school communication programs were funded at Howard, Liberty, Sixteen Acres, and Van Sickle.

In the opinion of the foreign language teachers, the Amity Scholar Program this year was only moderately successful. Basic flaw of the program was the lack of skill in teaching methods on the part of the Amity Scholar. Student perceptions, however, were more positive.

According to classroom teachers at Sixteen Acres and Sumner, the Conversational Spanish Program was very successful in attaining its objectives. Indeed, one of the primary goals, increased integration, was met as cross-racial friendships increased at both schools this year.

Hispanic students at Sixteen Acres, White, and Van Sickle, not in TBE, were given the opportunity to participate in a Spanish Language Arts Program to increase their competency in their native language. According to LAB testing results, students did make progress in both their reading ability and writing ability in their native language. There was some concern with the small number of enrolled students at Van Sickle.

The basic service provided by the Home-School Communication Programs was assistance in the communication process between the school and non-English speaking homes. The objective, to improve that communication process, was successful according to classroom teachers affected.

Chapter 636 funding at three schools (Glenwood, Van Sickle, and Putnam) was allocated for in-house suspension programs. Objectives of these programs were to decrease out-of-school suspensions and to improve student behavior. At one school the program also hoped to improve student self-esteem. Analysis of suspension data indicates that only at Putnam was there a decline in the number or rate of suspensions this year. Totally, 56% of the students served improved in behavior and only 40% showed improved self-concept. Classroom teacher ratings of the programs ranged from fair to good. Least successful aspect of the program, according to teachers, was improving the quality of interactions between students.

Nine elementary schools and two junior high schools received additional Section VIII monies through Chapter 636 for programs to attract out-of-district students to schools on a voluntary basis in order to enhance racial balance. This year 1064 students, more students than ever before, were voluntarily enrolled in magnet school programs. Greatest rate of increase came at Brightwood and at Chestnut. Greatest rate of decrease was at New North where more intensive recruitment seems justified (though projected enrollment for 1985-86 signifies an increase).

Racial distribution of enrolled magnet students closely matched the public school population. Of the new magnet applicants, 46% were actually enrolled. However, while 59% of the white applicants were enrolled, only 34% of the non-white applicants were enrolled. We do not appear to be adequately meeting the magnet program needs of non-white students, and we thus need to conscientiously explore new ways to accomodate increased numbers of non-white students in our magnet schools.

Although each magnet school had different Chapter 636 programs with individual goals and objectives, each school had a magnet objective to provide a strong basic skills program. Results of achievement testing in reading indicated that, at each grade level tested, students in magnet schools had grade equivalent gain greater than expected gain. Exceptional progress was recorded at Lincoln and Sixteen Acres. Mathematics achievement test results were less positive, totally, though progress at Lincoln and Sumner was exceptional.

Results of sociogram testing indicate that magnet schools continue to provide a sound atmosphere in which integration can occur. This year magnet schools had the highest cross-racial selection rate ever and a rate higher than that at the non-magnet schools.

Parent perceptions of magnet schools were very positive. The most successful aspect of magnet schools, according to the parents, was providing an enjoyable learning experience for students. Least successful aspect was providing opportunities for parents to become involved in school activities. According to almost two-thirds of the parents, the primary emphasis of magnet schools should be academic standards. Student perceptions of magnet schools were likewise positive and more positive than last year.

Ten schools allocated some Chapter 636 funding in the area of science, two for the first time this year. Objectives of the science programs were to improve student achievement and attitude and to improve integration. Results of achievement testing for grade 4 were very positive, as average grade equivalent gain was 15 months, but results for grades 5 and 7 were less positive, possibly because of the use of year-to-year testing with different levels of the MAT. The science programs did make a positive impact on student attitudes, however, according to results of student surveys. Finally, sociogram results indicate that there was a slight increase in cross-racial selections at schools with science programs.

Almost $60,000 was allocated for staff and curriculum development during the 1984-85 school year. Staff development workshop topics included art, Spanish, human development, word processing, computer literacy, physical education skills, study skills, substance abuse, multicultural story-telling and writing, and science. Curriculum development workshops included telecommunications, word processing, science, engineering, TBE, study skills, social studies, parenting, and elementary math. Evaluations of the workshops indicate that staff and curriculum workshops were successful.

An underlying objective of the Six-District Desegregation Plan and of Chapter 636 Programs is to increase racial/ethnic integration. Based on data of this year and of previous years, Chapter 636 programs can be helpful at increasing integration. Chapter 636 teachers listed many activities which they carried out in order to enhance integration, but less than half utilized techniques such as teaching multicultural units of study and preparing special activities for different ethnic holidays. In order to continue to maintain progress in integration, more Chapter 636 teachers should make use of such integration techniques.

To assess the progress of integration, a sociometric instrument has been administered twice each year to some third, all fourth, and some fifth and sixth grade students in all elementary schools. This year, on both the Fall and Spring testings, the mean cross-racial selection rate was at its highest level ever, with the greatest number of selections coming on the "new friend" question. The school activity which promoted the greatest cross-racial selecting was games, and thus this activity should be encouraged.

School activities with the least cross-racial selection tendency were field trips and lunch, indicating that teachers need to be more directive in pairing students for these activities. Girls continue to have a lesser tendency to select cross-racially than boys. Finally, a few schools have shown minimal or negative change in integration. Teachers here, at the direction of the principal, need to make a more concerted effort to increase opportunities for student friendships to occur.

A survey of principals, conducted in May, indicated that the Chapter 636 programs in their buildings had generally been very successful. Most successful objective was enabling the schools to better meet the needs of students, while the least successful objective was increasing parent involvement. As in the past, principals were concerned with fiscal restraints caused by Proposition 2 1/2 and insufficient increases in Chapter 636 to keep pace with inflation.

Classroom teacher surveys were returned by over 500 elementary and secondary teachers. Teachers were asked to judge the effectiveness of Chapter 636 programs at accomplishing six general objectives. According to both elementary and secondary teachers, the most successful aspect of Chapter 636 programs was enabling the school to better meet the needs of students, while the least successful objective was increasing parent input.

Fifteen non-magnet schools volunteered to survey parents concerning the special Chapter 636 programs there. Over 500 parents reponded. Responses of parents were very positive as most felt that there was a need for the programs, that the programs improved the quality of education, that the programs should be continued, that their children were receiving a better education because of the programs, and that their children enjoyed participating in the programs.